

tactggagaa agtagagttg aaaccaatca ttcaacatca tggagtg

407

<210> 2317

<211> 426

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-D2

<400> 2317

aataaaattg ccatagaatc cctgaacgaa ggtagaattg gcatacgagc tcatatgact 60  
ggacttgccc aaggtgcaat ggatattata tttccatata tacatgagac gaaacagttt 120  
ggctcccgtg tcggtgattt tcaaggagtc cagtttcagt atgcacaaac tcgagttgaa 180  
ttacaagcag cgcgagcgca tgtttacaac gctgctcgta tgaatgatgc aagtatatct 240  
attcggaagg aagcagcctt cgccaaatac tacagtcccc aagttgccga aagaattgct 300  
tccaaatgta ttgacttggc tggaggaatg ggattcgtga aggaatttgg tttggaaaaa 360  
tattacagag atgtgaaaat acgacacatt tatgaaggca ccgataatat ccagttgcaa 420  
acgata 426

<210> 2318

<211> 437

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-D4

<400> 2318

acgcgtccag tcaacgtcga attttccttc gacttgggcg ccaatcttct tcatcttctt 60  
agaatgaaat tgaatatcgc taatcccgtc actggttgct agaagcatat agaagtggac 120  
gacgaaagaa aacttcatgc tttttttgac aaaagactgg tgcaagatgt cccaggagac 180  
gctctaagag acgaatttaa cgatatatt ttcaagatca tgggtggaca agataaggaa 240  
ggattcgcta tgaaacaagg actcttgacc actggtcgtg taagactctt attaaagaaa 300  
ggagactcgg gttgccgagg gtactgtatg agagactgtg aaagaagacg aaatagcggt 360  
cgcggttgca ttgtatctcc agatatagct gtgttgaacc tcatcatttt gaggaaaggc 420  
gaataggata ttctctgc 437

<210> 2319  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-046-Q1-E1-D6  
  
 <400> 2319

cccacgcgtc cgcccacgcg tccgcttata ggagaacagg catgtctaac tggaaggaac 60  
 gactagactc gtggattgga aagagtagca gtgaatattc caaaggtggc aactcttcgc 120  
 cagaatgggg ttcatctcct aaattgggta tcagtccttc gaaactaagc aaaagtcac 180  
 gcgctcaaga agtttggagt aaaacagtgc atccttgggg gcgttcttac tcaggaaaga 240  
 tacgttatga caccgtggat aaggacacag agaaagacac aagtatattt gagatacatg 300  
 atctgtccaa gaaacagagt ggcattccat aagaacagac tttgtgagtt ttcaatacaa 360  
 tactgtgctt gttgttataa ttttcataca tgagtgtaca tgctgttttg ttggac 416

<210> 2320  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-046-Q1-E1-D7  
  
 <400> 2320

cccacgcgtc cgcgctgggc aagatggcct tgtgcaagtc aacaaacata gaaaagtaaa 60  
 gagattgcaa gaagataata ttttgaatag agcactatca caaccaggag atgtatttct 120  
 gtgcttttgc aacatccagt tgttggtgaa tgcagaaaga gctattatag gaaatattac 180  
 ttgtccagaa agtatcgaat tgtgtcgtct attagctgga catatagcgg tttggttcga 240  
 tgaacatttg gatgactttc gtttggaagc tatcttggga gcactattgt gtacttggtta 300  
 ttgtgagtgg aagcgttttg aaggagaatt ggggggtacaa gaatggaatg aattggagaa 360  
 gatattctcc ttagatactt ggaagcttgt gcttgggtaca agacaaagag tggataatat 420

<210> 2321  
 <211> 277  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-E1

<400> 2321

actgtagtcc tcttttgcgc gccaaagatg caacaactgg aaatgaggca catatagtta 60  
tcgatgttgg taaattcttc tatgaaagtg cactagagtg gtttcacaaa tatcaattgc 120  
gcaatatcga tgcagtttta ctgacgcatg accacgcaga tcatgtgaat ggactagatg 180  
at ttgagaga ttttactttg catatgagag acaactgttg tccacttcca gtatactgcg 240  
aatgacagac ttttcgtaga atacaagcaa gttttcc 277

<210> 2322

<211> 398

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-046-Q1-E1-E10

<400> 2322

aggttccaca ggtgaagtca tgggaatcga cttttcttat ccagcggcat ttgtgaaagc 60  
acaaatggca gcaggaactc ctcttccctt ggaaggaacg atattacttt ctttggtga 120  
agaagataag aaccaagcag ttgtcttagc ccaagacttt atagatttgg gttttcgtat 180  
tttagctact cgaggaactt atgtgcatct catagcagaa ggaatgaatc cttctcaagt 240  
agaaatggca tttcaaatan gagaaggacg tccaaatatt gtggaccgca tcaagaatcg 300  
agaaatccaa ttgtttatta tgacaccggg aatagacaaa gataccgcaa atgagaaaca 360  
agtacgaagg acaagcgttg agtttaaagt gcctatga 398

<210> 2323

<211> 329

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-E3

<400> 2323

caacttttca gagtttcaat tacatactct tggtacattc attatccatg aagtatgtta 60  
ttggggtagt tatgtgccgt ttctattgtt ggatgccatt ccgtactttc gaaggtggaa 120

aatacaaaga gacaagggtta atgatgcctc cactcagtgga aactgtattt taggagtatt 180  
aagaaatcat tttttgttag tgttgccctct tattattgtg acgcatccct tttttgcgtg 240  
gatgggaacg cgagatgagt taccgctgcc ctctgtcggg gagattgctt ctcaagtgtt 300  
tttatttttt gtcacgaag actttattt 329

<210> 2324  
<211> 429  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-046-Q1-E1-E4  
<400> 2324

acccaagcgt ccgcccacgc gtccggtaat atccaaagca attcctgctg tcatagagaa 60  
acttgtttcg ttgttatatg caatgataga acatcttcca gtagaaagca aagtagtaaa 120  
gtcgtctcta gcggaaatat gtacggcctc tgacggcgcc tcaagttgtg taagctacaa 180  
ttggttgacg ttgttaattt tgccaggcgt agatatattt gcacatcgaa gtcctgaatt 240  
gctagctttg ttgtggcggt gtggatggaa atatatgcag aatgatactt attctgttga 300  
agatgcgaag gcaatgaacc tggcttgat gcgaatttat atacgcttaa tgggcatatc 360  
gaagatgagt tctctcaaa caagtgttcg taaaaagtat ttcgacactt ttcatacataa 420  
aggtgccat 429

<210> 2325  
<211> 416  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-046-Q1-E1-E9  
<400> 2325

gaccacacg tcagcccacg cgtccggtta cgttgtagaa atttcgtctt gttgggcggt 60  
tcagtttgtt ttaagtacca tgtcagaggc tccgcttttt tcggatagac ccataaatgt 120  
ttgtgtaact ggtgctgctg gtcaaatagc ttattcactt ttgcctttga ttgccggtgg 180  
aaaagtattt ggaccgcagc aacttgtgtc ttaagattg ctcgagattg aatctgcact 240  
tcctgtcctt caacgagttg ttaaggagct cgaagattgt gcctttcctt tggtagattc 300



cattttttaca acttcagacg caaaggaagc tttccgttcc tgtaacattg ccgtgctatt 360  
atgtgccttt ccaacgaaac aaggaatgga aagaaacgat ttgctagaaa agaattg 416

<210> 2326  
<211> 308  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-046-Q1-E1-F11  
  
<400> 2326

agcccacgcg tccgcccacg cgtccgcgga cgcgtgggtt cagtcattca tgtctgcccc 60  
aaccaagcaa acaccttcaa agaaacttcg aggtgcggaa aaagccgtat tggatatggtt 120  
tttaatagat gccgctaccc atctcttttg tgagctccct tttgtattcc attctttaac 180  
aaccacggtg aaccaagcaa ccattgggtc tgccatatta tggaaggaat atgctaaagc 240  
ggatccacgt tggggtagat ttcattgactg cacgggtggcc ttggaagtgc ctacctctaa 300  
tttaaggg 308

<210> 2327  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-046-Q1-E1-F3  
  
<400> 2327

aagttatgag gagaaggaaa gttgcaagtc aaagcaactc atcctcgata tgctcttgga 60  
aaattcggca ggtctgtttc agaattgttt tccgtgacat gtctatgtgg aaaagaagag 120  
agaggatatt atatctcaaa gatgatctac ccgtgatgga ttacaaattc atcttgggta 180  
atttctgaac attcatttgg tttccttata ttggaaaact ccgatgaaaa gttcgcagat 240  
aaattcagta aaaagtataa cagcagaata ctctaactgg aaacatatat cgaaatttgc 300  
gttatgtgaa aaaacgagtg gagttttcaa agaaccgttg cagtcttgat gtatcttacg 360  
ttcattagaa tagagaaatg agtaacagaa agaaactttg cagaag 406

<210> 2328  
<211> 295  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-F5

<400> 2328

accacgagt caagtttcca atgctggact ccatatgttg accaaaatga tggctttgga 60  
atggggtcct tatgatatgc ataccaatgc catcgtaacct atggtaattt ggacagaaat 120  
gggacagcac gtgtggggtg ctctgagaa atactatcta tgttggcatg tattctaccc 180  
catcgttttg tacatcctgt agatgttaca tacttgaacg tacttttggc tggacaagtc 240  
tcggatatga tttgtggaca gagtattgct gtgaatggtg gattaattgt gcatt 295

<210> 2329

<211> 244

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-G1

<400> 2329

gacacagcct gactttcatg gaatagactt tgtaacgctt ttggtctatt tgagctatat 60  
gtcgattatc tccctggcgt ttacttttct gactggttat atcggatttc ttgcatgttt 120  
ctggtttacg cgtaaaatat attctgctat tcgtgtggac tgagattgct ttttcgatgt 180  
ttttttgaga gaaaagataa agttggcata ttgagagact tgtaaaaaaa aaaacaaacc 240  
aaag 244

<210> 2330

<211> 291

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-G10

<400> 2330

ggctcgaccc acacgtcagc ggacgcgtgg ggaaagtccg agttccaact catcgaaaca 60  
gtcgcttcaa gatatagtag caaccagtct tcgagatcca cgagtgggtg attgggtgcaa 120  
aattatttta caaggagtta ctatcctagt ctttcctttg gtatctcatt taccatctgg 180  
tgttgtgttc ttctggacgg tgaactcttt gttgaattca ttgcagcagt ttttgcta 240

aggtagagga agacgatata tcggacttca ggaaagaaca gaattgtttg c 291

<210> 2331  
<211> 162  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-046-Q1-E1-G12  
  
<400> 2331

gacccacacg taagcttggt gcagtcattg tgttgagta tataaaggca atggctgtca 60  
ccaaataaat aaagaagtgt aaaaaaatag aaaaacataa aaaacaaaaa aaaaatgtaa 120  
gaaatggata aaataaaaaa ccaataaggg aagtcgtcc ag 162

<210> 2332  
<211> 386  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-046-Q1-E1-G3  
  
<400> 2332

gtgtttctac cagatcaagg ctaacatttg gtgtaactgc ttcaattgca aaggcttggt 60  
ctgacctgga tcatttacgt aatggcaagg ataaagcgct cttgaatttg cccaagtgt 120  
tcaaaagttc caaggacaan ggcaatcttc acgctcgtca aggacaaagt tctattgaag 180  
ccccaggtaa agctgagaga attgcaagac aaagagcaag atgtatccgt agtgtccaag 240  
atgacgtcgt accagaggaa cccaactttc tagcaaaggt tcccaaacgg gagcgagatg 300  
ggagagcagc ttttcgtcct tcaaagaagt caaaccggt ctccctcgga gccactttag 360  
aagatgtcct tctcaaaatt ccgaac 386

<210> 2333  
<211> 450  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-046-Q1-E1-G4  
  
<400> 2333

cgggccggcc cagcggtcca cccaagcgtc cgaaggatta gaagatctgt tgagcttggc 60

agactatggt atcacaaatg cagaatttcc ttggagtagt ttgggtcagt tgaatacgtt 120  
 aaatggcttg gaaaagcttc tggattctta tcctgccaga ttgtcatat ctacgttagg 180  
 gaaggaagga tgcgttctaa tgagtcgtct ggatgattcg gaagcagaac aaacgcagaa 240  
 aacaaccaca aatttctcta cgtttcctat tatggcagta aagacaacat ttccgttgcc 300  
 gacgctttgc agaacagaat gtatcccaa gtatcgagt atagactgtc cttgctggcc 360  
 tgtcgaaagt gttgtcgata caactggagc tggagacgcc ttatttggag gtattattta 420  
 tgccatactt caccatttta gtcaagaaca 450

<210> 2334  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-046-Q1-E1-H1  
 <400> 2334

agtcatccaa ctcagcgaaa cagcaataac tgtgaaaatg cagtaaacta gcagtatgac 60  
 ggaaagaccc cacaattcct gactagatag gtttaaggag gagagagaat catgaagtat 120  
 aagaagtggg gtaagagatg aaagaccact gcatgaggat aaggaatcta actgagtaag 180  
 gaaaataagc ttaagctact ttggctgggg aagtaaagcc taagaaagag taaattatgc 240  
 aagcaaaggc atgagagaag tataatagca caagcatgct tgaagaaaaa gaaagagatt 300  
 tcagaaaggg aagaaaagtc agctatagag aacaagtga ggagaactca caaagaagag 360  
 agcaccgaac gatcgaagaa gaaactttgg gggtaacacg ttaatgtggt gttagagaac 420  
 gtatca 426

<210> 2335  
 <211> 363  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-046-Q1-E1-H11  
 <400> 2335

aggttgctg acgccgtcgg ttggtctttg cgtgggatct tcatggctgt caagagcaaa 60  
 cgtgtacgca acgtaagtaa gggcaaaaag ccgactatca actacaccat cgactgtagt 120

aatccagtag aggacggtat attcgatggt gcttctttcg agaagttttt acaagatcgc 180  
 ataaaggttg atggtaaacc cggcaacttg ggaaacgtaa ttaaagttac tagaaaggat 240  
 gccaaagtgg aagtgtcatc agagattcga ctttcgaaac gctacttgaa atacttgaca 300  
 aagaaatatc tgaagaaaca acagcttcct gaatggctcc acgtaattgc atcgagcaaa 360  
 aat 363

<210> 2336  
 <211> 386  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-046-Q1-E1-H12  
 <400> 2336

gaccacacg tccggttgta agagactagg tgcagctata tttgtcgatc agtcaccatt 60  
 gcaattgcag tcgagtgatg gctcgtggaa acttgggtcc aaaaccttgt ccgattatgc 120  
 ttctctggtt catttggaga ccttattaaa gatacaacca gaagctgtct atcaacaaaa 180  
 tgtgcacgat tgtctgttcc gtgagccaag taaganagaa atcgactatt tcgtctctct 240  
 ctccaaagaa gcagacgcag agtttttggc caagttgatc aacgaccacg caatggccga 300  
 ctggagaccg actttgccgc atttgcaatg tccttgtctc gttatctatg gagaacaaag 360  
 taaaatattt cctgaagatg caactt 386

<210> 2337  
 <211> 447  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-046-Q1-E1-H2  
 <400> 2337

ggtataggtc acgcgggccc agccacgcgt caggatgaaa tgcagagatc tctagagaaa 60  
 ggcaagaaag aaaagaaagg aagacacagt aaatgaggcg agaaagcata ngaagtgaaa 120  
 cggattacga acccgtgtag tctaagcagt aaaagaaaga atgagtaaga aaaaaaggag 180  
 tcattccacc aggggagtaa aggcgcaaga aagaaacca aagcaattga cgggaatcgg 240

aaaaaggggt ggatcacgta aattaatccg atataaacgg agaaccttac ctctccaaga 300  
 aggtgttgca cggctgtcga aagaacgtgc tgtgaagtga gagaacgtac gagaaagcca 360  
 agtgaggaaa agaaggcaag tagagggcgg cccgagaaaag gagaaggcgt aagacgtgat 420  
 acagagaaaag aggaaaggat gaaatgc 447

<210> 2338  
 <211> 446  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-046-Q1-E1-H3  
 <400> 2338

cgggtcgacc cagcgtcgag ggaacggtaa cttgaacttt ggaaaccaaagggaatttc 60  
 gggaaccaat gggaggaaaa attataaaat tgggtgcaaa aattcaacat aatcccaatg 120  
 gcgttcctt caagttaat aattaaat gctgccaatg tattccaagc attgggcat 180  
 attcttggga gttgtttcaa ggaaaatctc gctcagtcac canctgaaca ttcgtcatcc 240  
 gaaaactagt tgcaataact gaacaatatt ttgcaaaaga gttttgaaca tcaacatgaa 300  
 gacaatgtgc agatttttag aaagaccttg ttcaagaaac atggcagcgg atcattattg 360  
 aagcaacgga ctttacagca ttctgacagc gctgtgaatt gttggcaaat tctcgtcta 420  
 ctttgccaca agattttcga cagtct 446

<210> 2339  
 <211> 331  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-046-Q1-E1-H4  
 <400> 2339

aattcacgag gaacgagcgt gaacgaagga ggaatctcaa gtaatcgagg aagaaaaagc 60  
 ttcggtgaaa gcgtgaacgg attttgtaca cactgcccgt caagttctgg aagtgtgcta 120  
 agaataagca ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaat aaaaaaaaaa aaaaaaaaaa aaaaaaaaca aaaaaaacaa aaaaaataaa 240

aaaaaaaaat aaaaacaata aaaaataaca taaaaaaaca ataaaaaaaa aaatcacaat 300  
actaaacaca aaacaagtaa aagggcagca a 331

<210> 2340  
<211> 424  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-046-Q1-E1-H5  
  
<400> 2340

accacgcgt ccgatttttt gttgtggagt cgggttggtt ggtagtacag ccttaatttt 60  
gtgggtgtta taaatcatcc aaggctaaat acgtaaagag gaccgaatca gggtaagagg 120  
tagaggagca agaagagaag agagaatgct ggggtggagta gcgaaacaag agaagggaag 180  
taaaaggtaa gaaagaggaa aggttttacga gagaaggaag tagaaagaag agagtgtaa 240  
gcggcgctcat aatagaaatc cgaaaggagt agaagaaaag agagagaaga aagaaaagaa 300  
gagaaaaagc ccagaagcca agataaggta tcaaagtaaa gaaagaacga aaacgagaag 360  
aagagacggt acgcttagaa gcagcaaacc agagaggaaa gcgttaaagc atgaaagaaa 420  
agaa 424

<210> 2341  
<211> 261  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-047-Q1-E1-A1  
  
<400> 2341

agactgcacg tggacacggc atctaactga gtaagtgaag tagactatga cgaacttggc 60  
tggggaagta gagcctaaca gtgagtaaata tacgcatgca aaggctatta cgagaagtag 120  
taatagcagt tagcatgact tgtaacgaaa gaagactcga gatttcaaata gcgcgaatga 180  
atactcagcg ttatcaaaca agtgtacgtg aactcatgga gcagttatca ccgtacgac 240  
gaataatcaa ccttgggggt a 261

<210> 2342  
<211> 387  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-A10

<400> 2342

cttcggccaa ggcgtcggcc cacgcttccg aaaacttcaa gtgattgaaa ccttctcgtc 60  
tcaagatatt atagctgatg cgtttgctgg agtcggacct tttgtgattc cagctgcaaa 120  
acttaaacgc tgtgttgccct ttggaaatga cctgaatccc gtatcagttg aatttatgtc 180  
gaggaatatt ctaagaaatg gtgtatctga attgggttaca acatattgtt tagatgcctg 240  
gtcctttata gaacagccta tacgaaaaga aatatatttt acgaaactta ttatgaacta 300  
tccttcgagt agcagtgatt tcctacgtgt cctcaaaggt ctgtacacag gtcgagaaaa 360  
tgcgcgcgcta cctactagat attgtta 387

<210> 2343

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-A11

<400> 2343

gacccacgcg tcagcggacg cttgggcgga cgcttggggg aaaaatgacc accacaacga 60  
caggaaaaag aattgcgtat tatgtgcacc gttggacagc aaccttgtag aagtttcttc 120  
aaaagattac caacctagta ttctcttctt tattccggag caacaaaaca tattccatac 180  
cttgtaaaga cttggaacag tttttccata cgtcggttga tcaagggtcca caaacgtac 240  
agcaactcaa gtcaagcctg caacacacac ccaactgttc tgtcatctat catatgatac 300  
aaaataaccc gggatttgat gaagaatggg tgagcaattg tatcttggaa aagacagtga 360  
agttgcgtca aagtcgggaa aaggtcaaag agtaagcact gtttt 405

<210> 2344

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-A12

<400> 2344



gaacgtcaaa aaaaattgaa ggaagaaaag gagttggaaa aaacccgggt aaaaaaagat 60  
gaggaggatg acaatattct ttgaaaataa ttttgttga taataaaaga taaagaatgt 120  
ttggtggatt gtatggaagt tttgcaatga gtagaacgcc aacaaggaat atcgttatgc 180  
gtatgtgtat acggaacggc aatggattgt aactgatagc aaagctaagc cttgcggaac 240  
ttttcaaaag ccatgttcct tttttttcga tacgaatttt aatttggaca acctcaagag 300  
gtttccaaaa aagtagggaa aagtcaggac agacacttgg aagtgtcgca ctcccttgga 360  
gatgtgtggt tggtttcccg ccttgtatgg aaagttgtgc tg 402

<210> 2345  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-A2  
<400> 2345

agcaaacatt tagaacaagg tatgaaggaa gcggaagaa cgcgaaacgga aggacaagaa 60  
ttgcacaatg ctttcttcca agattctcaa accttaagcc gagactatgt gaaacgaaga 120  
gatttatctt gtgagaaagc aactcaagaa ttgacgagtt gtaagaactt gactcaagaa 180  
tgtatcgaaa aaggcataga aaaggacaca agcacagcag caaaggtgaa agatggatta 240  
tctgaagaaa agtcagcttt gcaagatttc cataagaagc aagtagagtt tgtcgataat 300  
atagcggggt ccgtagatga attgatgact tctggattgc gagtagatga accgactagt 360  
actactctc gtaagagaca gtggaattat cctcaagaat tgggacgaac 410

<210> 2346  
<211> 390  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-A3  
<400> 2346

ccggcccaag cgtcaggaaa aagttagctc agagactaaa acccaatgga attcttcatt 60  
tgtttgtcta tggaaaatat ggaagatggg aaatccgttt gatgcaacga gctattcgat 120  
tgctattagg aaaggaaaag gaaaactgga aacaaggagt ggacattgga cgcaaattat 180

tttctcgtct tccaccagat aaccgaatac gcaagagaga agaggaaaga tggtaagag 240  
acaataagca agatgcgaca ttgtccgata tgtatgttca cccgcaagaa gtggatttta 300  
ctattgattc cttatttcat atgatcgaca gtagcaactt gcagttttta ggattctcaa 360  
atcctcaagt atttgatatt tggagactga 390

<210> 2347  
<211> 382  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-A5  
<400> 2347

cccacacgtc cgatcaagtg gtagcgtaca agcgttcaga agaagaaaaa tggagccaag 60  
caggtgaaaa aagatggcag ttattcaaaa gactggaaaa agagaatgct actgcccgt 120  
ttttcttaca aaacaaagct atttttccag gtgctagagt tttggaactg gcttgtgggt 180  
ccggagaaac cactttgcaa gtagctgcga aagtaagagg ttattctgta ccttcaggag 240  
agaccacggg ggaagtgggtg gataaattgt tggatatatt acgtccatct agtcaccagg 300  
aagggaaact ggatgggtacc agcaatagtg gttcggtagt aggtgtagat atcgccaaag 360  
gaatgctgaa tgtgttcaaa ag 382

<210> 2348  
<211> 397  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-A6  
<400> 2348

gaccacacg taagatcaga tgatagagaa cggacgttca tgagtaacag gatgaagcca 60  
gggaggtgat gaagaatggc agatattcga aatactggta agagagagtg ctactgcccg 120  
ctttttctta cagtacatgg ctatttttcc aggtgctaga gttttggaac tggcttgtgg 180  
ttccggagaa accactttgc aagtagctgc gaaagtaaga ggttattctg taccttcagg 240  
agagaccacg ggggaagtgg tggataaatt gttggatata ttacgtccat ctagtcacca 300  
cgaaggggaa ctggatggta ccagcaatag tggttcggta gtacgtgtag atatcgccaa 360

aggaatgctg aatgtgttca aaagcacgtt ggaaaaat

397

<210> 2349  
<211> 370  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-A7

<400> 2349

cggacgcgtg ggaacaacat gccacagcat tcattcttgt ccatgggtgc ctctttgcgt 60  
tccaagctcc tttcaactag actcgagctg tcgcaattgc aacaacaaag aaaagagttg 120  
gaagaacaag tgcaagtatt gaaccaaacc aatcaacagt tggcatccac cgtcaaagaa 180  
tataaaacga gaatatacga gttggagcaa acagcagatg ctcaaaaaca acaaatagag 240  
tcgctcgaag cctgtaaaat acaaatgcaa gaagaaatag agtcattgga gaaacatata 300  
ggaagtggat actttaatcc gagatataca aaagtgttgc atctcaaagg aggacctcct 360  
ctttccaaaa 370

<210> 2350  
<211> 407  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-A8

<400> 2350

agcccacgcg tccgcccacg cgtccgaacc aatgtcgcgc aaagggttgcg gagtttgctg 60  
ctcttgctgg agatttcaat cgtgctattg acttgtttga aaagggttgcc tccgtatccc 120  
ttgaaaataa gctactccgc tatggtgcc aagagtttct tctccgagct ggactttgca 180  
gagtctgtct cggagacgaa gtgggtgctt ctcgtgcttt ggaaaagtac aaatccttag 240  
attccagttt taatgacagt cgtgaagcca agcttcttga gaaagtaatt ttggcagttc 300  
aagaaaatga tgaagaagcg ttactgatg cagttgcgga gtacgattct ttgtccaagc 360  
ttgatccgtg gaagacgtct atcttgttga aaattaagaa aaatctc 407

<210> 2351  
<211> 346  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-A9

<400> 2351

attccgggct gaccacgccg tcagcacaat atttgtcttc tttaacaagt attattcgtg 60  
accaactaag aagactgtct ttgtccactt ttattgtggc ctatcctaata tctggacaag 120  
tctatgatac tgtgagaaaa gaggaggagtc gagaaaataa tattttctata gaacactggg 180  
ttgattatgt agttggatgt ggtgcagata tcaatgggtg ttgttgtcgt acaactcctt 240  
agcatattca gtgtctgaga aatcgagtga gttgttctcc aaaagacgaa cggaacacaa 300  
gtctactata tgcttgaatc tcatacgatg aaaacacctg cggtta 346

<210> 2352

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-B1

<400> 2352

agagcaagcg tgaaccgtga gggtagttca tcatggatga gacaacacgt caagatgggtg 60  
ttagtgcttc tctttggact gttcgtcgtc tctctacac agttatttta gcattctctg 120  
gcatcagcat tggtttggat tgacgtaaag cagacaagat atggaacgac agcttattct 180  
atgatgggaa gtacattacc ttttgtgctg attctgccgc ttctgttgta taaggagggg 240  
accatggagc gtgtagatat gtcattggcg tggcgtctat aagtttgatt ctagtccttt 300  
tcttgtggct ttttacattt gtaga 325

<210> 2353

<211> 424

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-B10

<400> 2353

gaccacgcyg ttcaggaaac agacagatgg ccaacgctgg tcaaaatggc cttgtgcaat 60  
tcaacaaaca tagaaaagta aagagattgc aagaagataa tattttgaat agagcactat 120

cacaaccagg agatgtatatt ctgtgctttt gcaacatcca gttgttggtg aatgcagaaa 180  
gagctattat aggaaatatt acttgtccag aaagtatcga attgtgtcgt ctattagctg 240  
gacatatagc agtttggttc gatgaacatt tggatgactt tcgtttggaa gctatcttgg 300  
gagcactatt gtgtacttgt tattgtgagt ggaagcgttt tgaaggagaa ttgggggtac 360  
aagaatggaa tgaattggag aagatatctt ccttagatac ttggaagctt gtgcttggtg 420  
caag 424

<210> 2354  
<211> 389  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-B12

<400> 2354

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aagggtgcag gataataaag gtcgtcaaatt gactgcgcct gatcagaatc gacaaggcct 120  
tggaggtgct ccttcttcac aaggacggaa tcgccaaggt gaggaaccag caggaggcag 180  
aggaccctcc aagtggagag gaggttcttc tgatagagga ggaggaggag gtagaggagg 240  
aggcagagga aatagtcgag gaagcagtcg cgggtggtagt tttcgaggtc caatgaataa 300  
taatagacag gaaagagatg cttcacaagg tttcgccaac tctgcaaagc gtggtgggag 360  
agaccgaaca aatgataaaa gtgcgacta 389

<210> 2355  
<211> 400  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-B2

<400> 2355

gaccacgcg tcaggatatt tctcgtcttc tttccctct tctacaaaat gtggaacagc 60  
caaatgactc gtttatagca cggattatg cgcaggaagg aagtcgcctt ggaacaaagc 120  
atcaggagac ttttcgcaag ttaggaactg agagcttgga ggatacagtt gcggaagccc 180  
tttatgaact ttataagatg atgactgtgt ggaatcagga ccttgaagca cgtgagcacc 240

agtcgaatac gaaggaagag ctcgaaaaca cagcaaagtc tcacgccctt ttctgctata 300  
 ttctaaaaat attgaagaaa tttttgcaac tgtggggtgt cgaatctttt tcggacagtg 360  
 gaaagagagt tttggcaata tacgactcgt tacagagctt 400

<210> 2356  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-B3  
 <400> 2356

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 caaagaagac gaacaagaag aaatgcaaag tgaagagttg acaaggagtt gttcgggaatt 120  
 tcttctttcg tattcttccg aaatggtaga ctgtataacc tcattgagcg atgacgacga 180  
 agagaaagag tcgttcgtgg cttctcgact tggacaaaaa ctgggaaaga tgctggaaag 240  
 ttatgcctcg cattgtagtg gaaaaataa gactttgttg tttcgtcatg ttccggacga 300  
 cacaccaacg aagcattggc ttatcgacaa gttcaagtta ccaacgagaa ccttacgggt 360  
 taccttgtca cctggagttc gtcgaagaag gaagaataag agttttgc 408

<210> 2357  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-B5  
 <400> 2357

cccggctcga cccacacgtc agcccacgcg tccgaagggtg atacaaggga tactgtctta 60  
 gttccagtac atcatatatg caaggaaaat agatatgttc ggctaccaga gttgttcggt 120  
 attccgtttg tcatgagagt tgcctcttgt ggagagccgg tgggtcaatt attgcatcga 180  
 gttggagaat atttgaaagc caaagaggag gagataaagt cgtggaagtt gtatgaaatc 240  
 agggatgggt tattttcttc attagatgac atggaaaaag tatgggttcc agaacctctg 300  
 tcggatgacc gaggagagtt ttcggtttcc ttaggtttgg aacataaaga tgagaatgca 360  
 aaacgttggc agtcaccttt ccccaaactt tttatggaca aacccttaa gattcgggggt 420

t

421

<210> 2358  
<211> 399  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-B6

<400> 2358

aggtttgttg ttggtctggt tgtgtttgtt cccactatcc aactccgttc aacaagatga 60  
agcgtttgtt cctattgggc ctcttcgtga aaaggatgag cacgcaacac agccttcaca 120  
acctgttgta aagccacatg gtagcaaaca ctggaagccg ctccagtgtg ctcccaacaa 180  
ggaaaaagca gaggcattga taaaaaggc aaaaaatagt ttgagtgcgc ttttctcaaa 240  
ccggttggtc aagcatatag acgtcgaaag ttgtcaagag tttagagtgg tcgaaataaa 300  
gcttgacgaa aaaggtttga atttggataa tggacaagag catatcaagg aaagcttttag 360  
aatattggca gagtttctcg accaatgtgg agcgaagaa 399

<210> 2359  
<211> 393  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-B8

<400> 2359

agcccacgcg tccgtggatc gattcctcgt gacggagatg aagtcttate tctcgtcttc 60  
ttctgtttgt tgttgggtgc cttgtcatca cttgcctcgt tctagtggat ttcacacctc 120  
tcttttttgg agagcgaatt atatgtatga acaacgaata ttgaaagaaa gttttatttc 180  
acgaaataat tgactagggt gagagcgaat atgaatgtac gcaagcctca tcgttttgta 240  
ataagagtcg aatgcatagc cagcaacttg cacagtaaaa tgcggcgtct tctaacagta 300  
atggatcgta gcttagacag aggatggaat aggcaccaga aagcagctgt tatttggata 360  
actatttcct gtttgatact ttctccgggt act 399

<210> 2360  
<211> 342  
<212> DNA

<213>      Cyanidium caldarium

<223>      Clone ID: LIB190-047-Q1-E1-B9

<400>      2360

attttttaacc aaccttaata cgcaaattta acccctagta gaaaaacctc aaccggaact    60

tccgaaggag ctaccaaagg actttctgaa aggtaagtac catatagctt gttgttagtg    120

aaaaccaatt ttgcagattt aaacctctgt caaaaacatc ttgccaacat gtttcgttgg    180

ttcatgttat tctcagaata caataagtgc cgaattcaaa tgactatata tagaaagtgt    240

aaagaaagac gatacaagga aataagagaa cgctctgtggg agtgggatga aggaatattc    300

cgctcggttaa actctaagtc tcgacagctt ctagttgaag aa                        342

<210>      2361

<211>      398

<212>      DNA

<213>      Cyanidium caldarium

<223>      Clone ID: LIB190-047-Q1-E1-C1

<400>      2361

agaacaccga gtccatcggc atctgcctat tctcgtgaac aagtacagcg tgggtggttat    60

ggagaatatc aatctcaaca atctgctagt tactatgtaa ccaagtattg caagaaagca    120

gtacaacaag taacttatac ctcatgttct acttattacc catcgcaaac tgtagaacag    180

aagacttgct acaagacagt agcagttcct acagagtatc agaaatattg ttacaagcaa    240

gtggaacagg agcaagttgt tcaaaagagc tgtcccactt attattcagt acaaaagggtg    300

aaatatcaga gctgccttac ttatatcacg cagccaacta tcatacccaa gtactgcagt    360

atgtcgggtct ctgaagagta tgtacagcaa cagcaatg                            398

<210>      2362

<211>      396

<212>      DNA

<213>      Cyanidium caldarium

<223>      Clone ID: LIB190-047-Q1-E1-C11

<400>      2362

cgcgtcagcc cacgcgtccg agaatatggg cagtctttga gtgccaatgt gtacctttgt    60



cgtccagaaa ccaaaaatat gctatattggc ccacgtgagc agaaacagcg cattcaacaa 120  
acgcattgggt tttgttgtgt acctttccac agtcatcact ggaacttttg ggaagactgt 180  
ggactgaaaa atttatcttc tcatctcgtg ggacaaagaa acaacgacaa cgacgacact 240  
tttcttattt ctgtgaatat acaagataat actcgatctc catagtgaac agtagactag 300  
tatttttttg aataacaact acgccttgta aaaatatggg ttctctagtc aaaatgaggt 360  
ggcttcgctg gtcttatgaa ggggtacagt tgctga 396

<210> 2363  
<211> 420  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-C12  
<400> 2363

accagcgtc agaattattt tcaattgaga aatttttggg ttgtggggaa gaattttcag 60  
atagaaaccc ctcaagttgg agtccctatt cacttgaagc aaacgtgtgt gacataaaac 120  
aacgcaatca acagccacaa ctattggaat aggttgaatg atatacaatg ctctcaagc 180  
aaaaaatata gaagaataaa gcgagtaaaa cgtttatctc tagcacaact ttttatacca 240  
gcaacgttgt tggaacgctt caggggatca tcgatacttg attaattcag aatggactac 300  
gtttatctca cctccgaga atccttccaa aacatacaaa cattcgagtg ctttggtttc 360  
ggttaaacga aaaattccct ccagccaaat ccgttttgtt ccgagccaac tgaagaacct 420

<210> 2364  
<211> 272  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-C3  
<400> 2364

tgcatgatga taaggaatct aactgagtaa ggaaaataag cttaagctag tttggctggg 60  
gaactaaagc ctaagaaaga gtatattagg caagcaaagg catgagagaa gtataatagc 120  
agaagcatgc ttgaataaaa agaatcatat ttcataaagg gaataaatat cagctataga 180  
taacaggtga aggagaactc aaccagatga tagcacccaa cgatctaata agaaactttg 240

gtggttaacat gttaatcttg tgtagagaa cg

272

<210> 2365  
<211> 412  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-047-Q1-E1-C4  
  
<400> 2365

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tggggttgga cgttatttat gaacttggac tctattgaca caggaattaa tgctcctttt 120  
gaccggtttg cagacgcctc acgtggagag gacgcagcag taaccaaaaa tatagtgcac 180  
attcgcttgc aacaaagaaa cggccgcaag tgcttgacga cgattcaagg gcttgacaca 240  
aaattggatt tgaataaaat tacaaaggcc ttcaaaaagg agttttgttg caacggttgt 300  
gtcgtagacg acgcagaact gggaagagtc atccaactgc aaggagacca agaggataaa 360  
gtcaaaaagt ttctagttca aggagaaatt agctgaaaaa gacctgataa ag 412

<210> 2366  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-047-Q1-E1-C5  
  
<400> 2366

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agttttatgt tcgggtcttt gtaagagtaa catttaccgc agttggatga acaatagtga 120  
gagtgagcat tggagaaata cgaatatttg ttgtcctcgt cgaggtcggc tttttcatgg 180  
gagttcaatg acggaagagt ctctgatctc cgtaccttat ctattatctg agcttcgttc 240  
tttgatttct tatgtttcag gcaagcctgt gctttgtaaa gggctctgcta gcttcattcg 300  
tgatcgttta cggacgttga tagctttttc ttcattcttt gtggaaaggg acaacagttt 360  
tatggatttc accggtttat ccaactacac gcacg 395

<210> 2367  
<211> 380  
<212> DNA

<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-C6  
 <400> 2367

agcggacgcg tggggaaaag attgcctact gaaatgattc aaataaggac tgtattaaaa 60  
 gtactagaca actcaggacc aaaaacagca agatgtatag gaattcttgg accacctaaa 120  
 aagtttgcta ctgtcgggtga caagattgta gttactgcag agggaaaagt ttaccacgga 180  
 atcgtcgcct gttgtaaggt ggaaaagaag agaccggacg gttcctttgt aagaatcgac 240  
 cagaacggag tcattctagt agattcaagt ggaaagccag tgggaaacag agtatttggt 300  
 gttttgagca gtagagtga gcaaccggaa attctctcct tgggacgcgt caaaaccatg 360  
 taagctttta tagttagtg 380

<210> 2368  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-C8  
 <400> 2368

gaccacacg tcagcccacg cgtccgccc cgcgtccgcc cacgcgtccg aaccagcgtg 60  
 tgacatggct acttcggaaa taaacaacca ccacaggaa gaacaaccat tcaaggagtc 120  
 cgcgtcgaaa gaagtcaacg acaagttcga ccaaacctat gccgaaagcg ttgccaagga 180  
 aatcatagaa agcaccgtgg gagaagagaa atacgaacac acaaagacag tggaatggac 240  
 caatcaaagtg tgtgaaaaaa tactgaacaa gttgttgga ctgcaaaagg ctttcaaata 300  
 taaacgtggg tgggtctatc ctcaggtaac gtttttacat ttagcgatag ccactagtct 360  
 cttgttcctt attgcaaaag 380

<210> 2369  
 <211> 368  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-C9  
 <400> 2369

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 taaggtgaga gaatggacga taaggaacta ggcaaaagga tatggtatct gcggtagaac 120  
 atatgaaaga agcagcaccg actgttttagc aaaaacacag cactctgcag aaaagagaaa 180  
 atgtaaagta tagagtgtgc ggcttgccaa atagtagaga agaaatcgat gaaagtgaaa 240  
 gcgagtaaaa gatgaggtat agagaatggc ggtcctaact gtaaggatcc aaaggtagcg 300  
 aagtacatag acgtttgaaa ggcgtccagt atgaaaggag aaatcagtgt agcactgtct 360  
 agtcgtcc 368

<210> 2370  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-D1  
 <400> 2370

agcccacgcg tccgcccacg cgtccgcatt gctcgaagct ttggccttgg agaagcttgg 60  
 caaagcctaa gtagaaggaa gaagaagaga gaacaggccc aaagaagaag aaagaatagt 120  
 ggatgtcata gtatggcaga agaagaaagc tctcaagttt ttcacgcca actattgcta 180  
 aatcaaggct ccaaagattg gcttcgttcg ttgggaaact tgctggaaac ttttacaacg 240  
 gaagaggtaa aggtagcaat tcggtagtgtg ttcacgtagt tcatgtgtag gatgaagaaa 300  
 agttgagtac tataatctcg cacttggaac gcgatgctac agaaatatcg agggtaggag 360  
 tcttgacacg gattttattg aacaactaaa ctattaaagt cactgcaaa 409

<210> 2371  
 <211> 227  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-D10  
 <400> 2371

acctacgcgt caggaactag gcagaaggat atggtatctg cggtagaaca tatgaaagaa 60  
 gcagcaccga ctgttttagca taaacacagc actctgcaga aaagagaaaa tgtaaagtac 120  
 agagtgtgcg gcctgcaaaa tagtagagaa gaaatcgatt aaagtgaaag cgagtaaaag 180

atgatgtata cagaatggcg gtcptaagcg taaggatcca aaggtag

227

<210> 2372  
<211> 150  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-D2

<400> 2372

gaccacgct caggaataga tgaggaaaga aagatcaagg aagtaagagt aagagaagga 60  
gtaatgtgaa tgaaagcagg aaagtatttg aagaagagag tgtaaagcgc gtaccttttg 120  
cataatgtcc cagcgagtga aagaggaagc 150

<210> 2373  
<211> 251  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-D3

<400> 2373

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aagaatggat ggcagtagtg tggttatcgt ttctgtgat tcttttgat gaaatgctca 120  
agtttgtttc aagaaagttg attcaaggca atataaagaa accaagaatt tgacaagatt 180  
gttggtggtg ctcaactttt ggactggaac aattccctgg tcgcctaaaa taaaaaattt 240  
cctcaagtct c 251

<210> 2374  
<211> 399  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-D4

<400> 2374

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acggatactg agtgatagtt cacagcgtct tactatagct agtggttctt ccctagaagg 120  
caacacaaaa aatattgaga aactgaattc ggattcttcg aaacaacaag cgaaggaaga 180

ctccccgtta caaggggaatg agacgagaga aaccagcaa gacgcaagtg atgtgattgg 240  
aaccagcgc ttggttccac agtcggaaca aaataagctt acaaacacaa aatttacagt 300  
tggaggagca tttgatgggtt tttcgatgtt taagcgtctc tctcaaattt ccgggacact 360  
tggttcctcg agagtggaca acttattccg ttccgtgtg 399

<210> 2375  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-D6

<400> 2375

agcccacgcg tccgctggaa tttctctgac tgttcttttt caagtttttc gtcgtattct 60  
ggaaaggaca gtaatcgagg ttggttgata atgatatgtc cttctgccgt tgacgtggaa 120  
gccatggaga aaatagtcga caaagagtcg ccattcttaa ataaagatgc tcgtccagtt 180  
atactggtga atcccaatct agttgatatg ggagcaacag gtttaggctt caacgcaaga 240  
cagctaagac aacgcttatt gagcacgttt gaatccatct acttccttcg agtgtattct 300  
gccggagttg tggttcgtca gtatcccttt gagtggagta tttggttgga aataaccaac 360  
gaagacgaaa atacttcttc cgactct 387

<210> 2376  
<211> 367  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-D9

<400> 2376

acgcgtcagc ggacgcgtgg gccggacgcg tgggtttttac aagcaatggc accataagaa 60  
cgtagcaaac catagagtcg ttcgtctaaa gcaggcctgc agtttctctg tggaagagtg 120  
agtcgttttc tcaaaaacgg taactatgcc gaacgagtat gagctggagc ccgattttat 180  
ttggcagcag ttttggaata tctaaccggt gacaatcttt gaattggctg gaaatgcagc 240  
acgtgctaata cagacgactc gacttggttc tcgccacagt gaacatgcag tgcgcaccga 300  
ctaagacgtt gaataacgct gctctgtgga gtgactattg ccacgggagg tgttttacca 360

tacgttc

367

<210> 2377  
<211> 405  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-047-Q1-E1-E1  
  
<400> 2377

aggagaaaag gctttgagaa atcggacttg tctttgctgc cttcgtccag ttacaatata 60  
agtgtttcct gtcattgttt ggacttttcg agaaatgtca tgctttggaa gagaccaaga 120  
caagcttggt tataagcctc gtgtaatctt aataactgga ggtgcagggt ttatcggttc 180  
acacgtcgtc tcttatttgc tccgggaata tccggaatat ttaattataa actatgacaa 240  
gttagattat tgtgcttcgt tgaaaaactt gagtgacgtt gccactatc caaactatcg 300  
ttttgtcaag ggagacattt tatccgaaga tctcgtcagt tacgtgctcg aaagtcatag 360  
cgtagatact gtcattcata tggctgctca aactcatgta gatgc 405

<210> 2378  
<211> 382  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-047-Q1-E1-E10  
  
<400> 2378

ggttacaagt aggagacgaa gcacctgact ttgagttgaa agaccacgac ggtaatatag 60  
ttaaattgag cgagttcaaa ggaaaatata ctgtagtcct attcttttat cgcaaggaca 120  
agacgtatgg ctgcacacgt gaagcttgca gtttccgaga taagatgtcg gaatttaacg 180  
aacttaatgc gaaagttttc ggtgtgagtt cggacagtgt agagtctcac aagtcgtttg 240  
ccgatgaaca gaagttgacg tttcccttat tatctgatga atgcggtaaa gtactcaagc 300  
tatacgcgtg tatcaaagag catgtttact atgcctggtc gctgcactta tgtcattggt 360  
ccggatggta ttgtaccaca ca 382

<210> 2379  
<211> 414  
<212> DNA

<213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-047-Q1-E1-E12

<400> 2379

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cacgcgtcag gaaagaggca aatacgggaa agcagtaaaa gaagaaagag aaaggaaaaa 60
actgagtatc aggaagaaaa gagggagtag atgaggaaag aaagatcaag gaagtaaaag 120
gtaagaaaga ggaaagggtt acgagagaag gaagtagaaa gaagagagtg taaggcggcg 180
tcataataga aatccgaaag gagtagaaga aaagagagag aagaaagaaa agaagagaaa 240
agccgtactg aagaccgaca caggtactcg aggagaaagg agacccaaat taaggtgaga 300
gaatggacga taaggaacta ggcaaaagga tatggtatct gcggtagaac atatgaaaga 360
agcagcaccg actgttttagc anaaacacag cactctgcag aaaagagaaa atgt 414
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<210> 2380  
 <211> 249  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-E2

<400> 2380

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accacgcgt aagctagttc ttggtttcc aaaattggcc atttattatt gtctcaacat 60
gttttgtagt acaaagccaa ctggatatca atcacggtca ccgtgaaaga atccataaga 120
cactgtatac ttgtcgtccg ttattaacta cgaggtgaat cagtcttcat caagttgttc 180
ttccaatcgt tgaatcttct ccctaagcgg actacatag taataataac tagaagagtc 240
aaataaata 249
```

<210> 2381  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-047-Q1-E1-E5

<400> 2381

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agcggacgcg tggggtgatt tccaccaagt cacaagaat cgtaaaagag aaaatgacga 60
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taggttttgt acatccactt ggaactagtg ttcaatgtaa caaactactac aaaactgcta 120  
 cttgttcttc ccagttttat tccaagtctt catcgtttct anggagaaac catgggggtt 180  
 gcaagtcgtg gtctcttgcc tatggaagca aggtggatcg gaacaagtac acttacagtc 240  
 atcctagttc cgtaaaacaa ggaagaggac caactatggt tgcttcgaaa acagagttgg 300  
 aacaacaagt aagatccaga ctagtcaagt tgtttgagca gacaccttgc atgcccata 360  
 tggtgagact tgcttggcac gacgctggaa catatgatgc acagacg 407

<210> 2382  
 <211> 165  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-047-Q1-E1-E8  
 <400> 2382

gaccacagc gtacggacag tgcacccggc aacgccgtcc gcgtgacgca tctagatcac 60  
 gacatcanca catgcaaata cggtaacagc gaacgggtgtg cctaataagag gtgtcaaagg 120  
 agtgagaaca gcatcaacag cacagcatca atgtaacgaa atggt 165

<210> 2383  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-F2  
 <400> 2383

ccacgcgtaa ggaaagcttg ggtccagatt cgattgagtt tatagtgaac cattccgaca 60  
 tgcgtcttct ttgcatcagt tcagaaaacc tggataaagt tcttgggaat aaagacaagt 120  
 ttcccaaact tgaaaagata gttttgatgg accgagaaaa cctgaatagt gatactctcc 180  
 cagactatgt tttggatata cagaaactta tatctgatgg aaacgaatct gggcaagttc 240  
 agccaggatc attggacgat attttctgtga tcatgtatac cagtggcact acgggggaaac 300  
 cgaaaagagt tatgttacca aacaaagcat ttctttgtga agttgccggt atattaaagg 360  
 ttactgatca ttatcacatt tcttttagaca atactgatgt aacaatgagc 410

<210> 2384  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-047-Q1-E1-F3

<400> 2384

gacccacgcg tcagcaaaag gagtctactc cttcacttgg tccttacgtc tgaggggtgg 60  
 aatgcagata ttcgtaaaga ctcttactgg gaagaccatt actcttgaag tggagccctc 120  
 agatactatt gagaatgtca agtccaagat acaagacaag gaaggtattc cccagacca 180  
 gcaacgtttg atttttgcag gtaaacagtt ggaagatggc cgtactctct cagactacaa 240  
 cattcaaaag gagtctactc ttcacttggc cttacgtctg angggtggaa tgcagatatt 300  
 cgtaaagact cttactggga agaccatcac tcttgaagtg gagccctcag atactattga 360  
 aaatgtcaag tcgaagatac aagacaagga aggtatntcc cccagacagc aacgtttgat 420  
 ttttgca 427

<210> 2385  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-047-Q1-E1-F4

<400> 2385

acgcgtcagc ggacgcgtgg gcggacgcgt ggggtcggat ttgggaagag tatggtgcag 60  
 ttacaactat cttctcgta tcagactcaa gtacgatatg tgggtgaaag ttatctgaga 120  
 gagaatccaa aacagaaaca tttactcgat agtcttaaag aagatacaat atcccaccaa 180  
 aatttgtagc agataactcg tttggcgccc aaagatgctc ttccaccgtt ttggtcnctt 240  
 gtggcaagta gcacgtggaa actgccacct cccaagtgtc catatgacaa ttatcaacgt 300  
 cctgcaatac tagacaaaag actagaagct cttcgtgagc gtcatgaaag aaagcagtat 360  
 agggaactaa tacaggactt acctagtctt gcgccaagcg aaacatc 407

<210> 2386  
 <211> 416

<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-F5

<400> 2386

gacccacgac gtcaggttgt ggagtaagtg cgcttggcag caaactaaaa gatggcaaga 60  
agaatcatcg gagcttatat gtctgacgct actgtagcgt ctctatttag cgtgaaaatg 120  
ttgtttctacc ttacaatact tgcgttctct atcactattg tgggtcttat gggtaagagt 180  
tccgacggta tttgggttca cagtgttcca gcgaaagacg aatattgtgc atacaagtct 240  
tcccttcaag taaaccacca cggcatagct tcctattgca agtatatcat ggctgtagca 300  
gctattgggtt tggttatcag cttcttcgag ttttggtatg cattcctcgg aattttcttc 360  
aagtggcaac aaaagttgtg gtatattgaa tctgctatca acgtgttttt ctgggc 416

<210> 2387  
<211> 413  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-G1

<400> 2387

agcgatgatt cgatgcggca caagacagtt gtgggtggcaa ctgcgcgctc gttatcatac 60  
aactactact gtccatagag tagcagcaga cgaagaaaag gaatctgtcg gtataaagcc 120  
taaacgtttg catcagcctc ttggagttta tccacaagga accaatctgg aagaagtgag 180  
agaaaagtgg caaagtgacg ctatggaact tatctcgaaa gtacctccga tagtagtcga 240  
tggtatgtc atagcgtgta atggaggccg cgggccatta ggacatccaa tagaatatat 300  
tcgtttggaa gcaccttata cttcaacttg caaatattgt ggtttgcatg atatcaacaa 360  
agacactttt gaaaagtgga aaaaagaaaa taacgaataa taaaatggaa aga 413

<210> 2388  
<211> 228  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-G10

<400> 2388

aggcccatTT tacatccgac aatttcagag aaccctgcta tgaaaacaca actggcatac 60  
agagacgcca tgttcaacag cttacggatg gcgaccacaa tgcaggatgt tcacgggacc 120  
agaataacaa ggacgccact agcagtttct tggccattca cggtgggcca cccgttttga 180  
ccagacttcg caagagaata tcggataatc atcacacttc gcgcttcc 228

<210> 2389  
<211> 94  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-G11  
<400> 2389

aaagacaatg aaaagaagga taaggaaaaa taagggaagg tggaattgga taggaaagga 60  
ttattccac ttcttaggaa ggacgttact ggat 94

<210> 2390  
<211> 398  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-047-Q1-E1-G2  
<400> 2390

gacccacgcg tacgggaatg gcggttttcg aggtcgagct tcccctggcg gacgtttttt 60  
tcgtgaagca aacaacaaca acaacaacaa ctatcggtcg cgcaatgctt acagtgaaac 120  
cccatcacia cttgttgaaa tgggtatttt tcaacatccc tgcgagaacg aactagtttg 180  
taagagtacc aacgaaaaga tcccgttttt taacgctcca atatttctgg aaaacaagac 240  
gcagattggc aaagtggagg aaatatttgg tctattaca gacgttcact ttactgtaaa 300  
accagtggaa ggtgtattag ctacttcttt tgggtanga gacaaattct acatcggtc 360  
agagaaactg ctgccgcttg aaagatttct tcccaagc 398

<210> 2391  
<211> 408  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-047-Q1-E1-G3

<400> 2391

agcaaaagga cataagattt aaacggcagc atggaggaag aaactggtac ggaacaacct 60  
gaaacacaaa cagcagggga aactgcacaa gaacaaacag acagtccggc agtagaaaca 120  
gagacctttt cgaatcaata tctagagcag cttatcttgt cgtacttgaa acaccaatgt 180  
ttttcaaaaa ctgccgagtc ttttgcgaga gagattgctg ttgaagatac agtggaagaa 240  
ggttcagcgg aaaccagtga aaaggagact tccattgagt gccttcctaaa gcaaatacaa 300  
gtgctggaca aacatgaact ggaactgtta gatttgacga agacggtatg gcaactcata 360  
aagaaaggag agtgtttgcc aggtttggac tgggcanacg tgggtactg 408

<210> 2392  
<211> 345  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-G4

<400> 2392

ccacgcgtca ggagaacgac agtagcgatg ggattgttta gtagactgtt tgtgaaaccg 60  
agtcgtgtac cgcaaagagt cgtagagttt caaaagcgca aggcggaagg ctactttaca 120  
tacaacgccg ggaagtacga ccgatacatc aacacaccta tttacctgtt tgtgtccttc 180  
accggtcttt atgcctttat tgacggttgt ctttgggcgg caggaaagaa ggaaagtcaa 240  
tcgtgaatag cgttttttgt ccttgtggac agtcttatga actagtgatt cgtttgttct 300  
gccagtttta gtttcttgta atgaaagttt ctttttttct cttgc 345

<210> 2393  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-047-Q1-E1-G7

<400> 2393

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ttcacgagtt ggcacacgaa gtactattac tggtagaggg acatatttat aggagaacag 120

tccatcggtc catattgtgg cagtacaacc gaccgaatct cctgttttat cgggaggcaa 180  
 atctggacct cacaagattc aacgaatatg tgcaggattt ataccgata tattggatac 240  
 cagcatatac agtgaactac tccaagttag ttcagccgat actatcgga tggcacgaag 300  
 gatggcaacc gatgaaggtt tattggtacg aatatcttct ggagctgcag tttatgcttc 360  
 cattgctatt ggaaag 376

<210> 2394  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-H10  
 <400> 2394

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 agctgttttc ctcgtagctc atgcagttcc cggtggagaa gatgcattca gtttcagtca 120  
 gacttttgga aatgcttctg cttcaggcaa cgcctctggt attccagcta caaccaagat 180  
 cccaagtta gaagtaacta gtagtgcctc atcaaaggac aatggaaaag cagctcaagt 240  
 agactttgca gattactcaa agggatatcc ttgcctagc tatttttacg ctccttctta 300  
 cacatcctat gtggaatttc ctcaatatcc atcctatcca tcatggcctt cttttaatga 360  
 gcagcctgcc tttggtggct tcgattccaa tgcagagttt ggaaagtctg aaattttcgt 420  
 g 421

<210> 2395  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-H12  
 <400> 2395

ccaagcgccc ggtgggtggtg atgccctgga ttgagctacg tagtggcaac tccgctgtct 60  
 tgaaagacat aactgcaagt attgaaaagc ctgacataaa atggataact aggacgaatc 120  
 tcagtacttg tctgaattct gcagaaggaa atgttacggt tgacttgtcg cggcagtgta 180  
 gcttgaagga tatattttca ttgaagcttc tcgacaataa ctttaagttg gcgtgtttta 240

atgatgcctt gtttttagtt ttaccaggct tatectttgt tattactggg aatcgtatat 300  
tctgtagacg ctccgacttg aatgaaacgg aagcattgga gtccctgcttt tcgtttatga 360  
agatatgccc cacgtacaag tcgttgagg 389

<210> 2396  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-047-Q1-E1-H2  
<400> 2396

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tcaaagggaa gatgtcgaaa acattttatt tctgataaag cagttggcag aatatgaaaa 120  
agaaccagaa tctgttcaaa taaatgagaa agatcttgaa agagatgggt tcgatacgca 180  
gcctcctcta ttttacgtcg ttattgccga agtttcgttt aggaacagaa tgtttgga 240  
tgtgtagggt ttgcgttatg gttttatgtg tattcgactg gagagcgctt catttggaag 300  
atcttttcgt gctaccacaa tatcgcgggc aaggaatang caaagctttg ttaagatatt 360  
gtgctgaggt tgcccttgct gaaaagtgtg agagatatca atggaacgtc t 411

<210> 2397  
<211> 390  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-047-Q1-E1-H3  
<400> 2397

agcaaagca acaacaggag acaaagtcaa tgaaatttca ttaccacatg atacaatgga 60  
tgtctacggc atacgaggac tcttaaagtt aatgtcgcca agctggagaa cggaacaacc 120  
cgattatttg ctacttacac ttggaataga cttgacaagc ctaggactta acttgaattc 180  
tacggagccc ttgtatttat cctttgaaac tccgtttctt gatatgaacc gaggtctcta 240  
tcatgaacca gaatatagtc ttccggaatg ttacaaaatg gaacaaaagc cgccattatt 300  
gaaattgggt catttttagga agtttcaatt gcaaacatta ttttatatat tttattgtat 360

gcctcgagat gcattacaga tacttgcagc

390

<210> 2398  
<211> 409  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-047-Q1-E1-H4  
  
<400> 2398

cgtaagggga cagngtgtgt ttgtgtgatt gggttggtata aaggcgcta ttttcaaaga 60  
gtccaaccta gtgagaaaac atgaatccgg aatatgacta ctttttcaag ttgttgctga 120  
taggcgactc tggagtggga aagtcttgcc tcttggtgcg ttttgccgac gacacttaca 180  
acgagagtta tatatcgacg attggagtag actttaaaat tcgcacgata gaactggatg 240  
gaaagaccgt caagcttcaa atatgggata ccgctggaca agaacgtttc cgcactatca 300  
cttcttcata ctatcgaggt gcacacggca tcattattgt gtatgacgtt accgaccaag 360  
aatcgttcaa caatgtcaag aactggttgc acgaaattga tagatatgc 409

<210> 2399  
<211> 375  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-047-Q1-E1-H5  
  
<400> 2399

agcggtttatt ggaagacttg cctcctccaa aactggcact taatggcgct ggcggtccaa 60  
cagcaactga acttgacagt ttgcttggaagggtggcac tatggtaact tatggaaatg 120  
cttcgggaa accatttagt attcctacta gtctatttac aacacaagat atttcactga 180  
aaggattctc gatgcttaat tgggttaaagt ccaagtcaga gcaagatgtg aagaaaatgt 240  
tgcaaagtgt cacacaaatg atggaaaagg accagttgaa gttttggatc gaaaggaaaa 300  
agttggaaca actcgaaaca acattagaag cgtaaccac aaaagaacct caacaggaaa 360  
gaagaatagt tttag 375

<210> 2400  
<211> 357



<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-H7  
 <400> 2400  
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 cgtttcaagt ggtttccaag tacagcttgc caaacagtta tcttctgtta ttcattcatg 120  
 aaatacatgt ctatggagaa aatgttattc gcaaaaggct gctcgtgttc gttccatacc 180  
 aacatctata gttgcaagtt acaactacag catatttcac gacgaccata atcgttcgac 240  
 agtaaaagta gattcacgag aatcagccta caacttaaata aagccgttgg gtttggtatt 300  
 ggaagaatca gaagatggaa cggtagctgt agctgatata gattctccag ggaatgc 357

<210> 2401  
 <211> 179  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-047-Q1-E1-H8  
 <400> 2401  
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 gtcaagtccg taaagcaagt ggggtcgtga agctgtgtgg aagagtgccca cattgtgact 120  
 gcgaagaagt ctgtacgaga tagttcgact gtggggcata ttggagcttg tagcgggaa 179

<210> 2402  
 <211> 290  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-A1  
 <400> 2402  
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 gaaaagatgg atgcaacaga acaatatatc agaagaaagg aacgatagtg ctgaggacgt 120  
 cagctcaaac tcatttgctt gtgttgcgag tgcagtttcc tcgaaattca tccaaactat 180  
 ggctgagaag gaagggtttc aatttcgtga aacattaaca ggtttttaaat gggtgagtca 240  
 tgccgcttta aaactggagc aacaaaattg tcaactttta ttagcatacg 290

<210> 2403  
 <211> 332  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-A11

<400> 2403

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 ttgtagata ctttgatgta gaatagttga caagaaagaa gaaataggat gaacaagaga 120  
 tatacgaata tagggacaac tgatgctcaa ggcaccagt atgtgtatgt ttatctgaat 180  
 ttgccacttt tacttccatt tctttagat atatatatat gtgtgtgtgt gtctgtacta 240  
 attttgact aaggacatgg tttctagggt ttattgcaaa aaagttgaat agtaactcgt 300  
 tctatatggt tcgttgagta atgtctagag ac 332

<210> 2404  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-A12

<400> 2404

tgaaaaacga acgagtcctt tcggtagtaa ctttgaagaa tctgaagctg cgtaattgctg 60  
 cgaacggtca cgtcacttgt atgaaaagta ctagctcaag gttacaactc gagcaaaaca 120  
 atactgcaat tcacttggtc gatccattgc ttgcaagcaa cttaacgagt caaacagcga 180  
 ctcgaagaga caccaacggt actattcttg caagattagg tatcgcttag tgcaacaaga 240  
 tacgtatata ttggtatatt tgcaatttta tttcgcttca aaagatgcta tatttactta 300  
 caagaacaaa gtcacttcac tgagtgtctt tgatgcaacc gtcgttgctt ttatgacagg 360  
 cagagttcta agtatccaat gatacattct aaacaactat tgttgtatgt aacaaaaaag 420  
 agtttacgct c 431

<210> 2405  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-A3

<400> 2405

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tgaaagggat ggaacgaaga tgatagaaat gttggcttcg tttccttcca gtcattgggg 120  
aagtcttcga atgaatgctt ccgttggttc ctggctcactt tccgacaaag ttcccaagtc 180  
cttttcggat ggaactcgat tccttcgcca tattggaagt ttgaatgaaa ccacatttcg 240  
tattgtattg aatacgacga tggacgaatc ttttgccgta gatatgactt ctacttattt 300  
tgggccttcc tatgaaacgc tagaaatcat tcgacgtctt cctgattgga cagatgcagt 360  
tacttttcag actagtggag 380

<210> 2406

<211> 424

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-A7

<400> 2406

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atattggccc aaactgtcaa cttgtagttt gttctgttga taacttgaaa gacttcttgg 120  
gtcagcaagt ttatgaacaa ctccagaaag tatactcgga taatgaaagc gttttgatga 180  
agttggatcc tctcgcgaag ttgttgggaa gaaatcttga acgattatgg aggagcgatg 240  
ttcctatggt gcccgaaact tcccagatgg atattgtttc caccagaact gatacagacg 300  
agatgcaagt aacagagcgt aaaggagttg tctcagtgcg acaaggccag tttgattgga 360  
tggagttctt gaaaacatat tgtgatttga cagagtctga agcaagagaa tctagttatc 420  
gact 424

<210> 2407

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-048-Q1-E1-A9

<400> 2407

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taaaggaaga gaaggaagaa gcagagaggg actatgagcg agaaggtgga tagtcgagag 120  
ggaaaaagcc cagaagccaa gataaggtat caaagtaaag aaagaaggaa aaggagaaga 180  
agagagggta agcttataag cagcaaacca gagaggaaag cgttaaagca tgaaagaaaa 240  
gaaatccgaa aaagaagaga aaaaggttaag aaagaagacc gaatcaaggt aagangtana 300  
ggatcaagaa gagaagagag aatgc 325

<210> 2408

<211> 186

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-B1

<400> 2408

acgcgtccaa aatgtagtca ctcgtggctc attaacaacc actttccggt agactatcga 60  
gaacatgcgc ctatctaacc ttctgacttg tccctctgtc ttgcgaagaa tcctgaccag 120  
ccttttattt tacgtctttc atattttcat ccgttattgt acattatctg cattttggat 180  
ttggat 186

<210> 2409

<211> 261

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-B10

<400> 2409

gcgtccacat ttgagtgttt tgggtactgg gctgaatata cttctcctgc actatgtctg 60  
cgaatattcg aataaagtaa ccaagtatgc aatggttttg gaatttccgg ggcggccttg 120  
caaccttcgg aatccgtgga accggttggc caccgggaat tctgttcaaa ccgttcacaa 180  
ggatttaaga acacctacgt tgggaaagga tgcactttaa aatcccgtgg gtacagagac 240  
ctgtcctaata tgatataaga a 261

<210> 2410

<211> 119  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-B3  
 <400> 2410  
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 ctttatcgca gaatacggat tacctcagtt tgcaaaacag tccgttttcc cgggtctta 119

<210> 2411  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-B7  
 <400> 2411  
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 caaggtcac cctatactta tggatattct agtttgagat atgcaagtca atgttccagt 120  
 ggaacttttc gtcaacagtt tgcaaggcat aagttgggag ggctacatat atccaattat 180  
 tgcttccttc cctttgttat cttaaaggaa ctaacaggaa cggaatatgg aaacgaaact 240  
 cttcaaaata tgacaaagga acagtgtcaa caacttgtcc acgactgccca aggccactct 300  
 tttggaagaa ctgttccttt agaccaagtc ccagaagaag acttggatgc agtgtatatt 360  
 ccttggtttg tcaagtgtaa ccctaaaaga tatccatcgt tgatgcatca 410

<210> 2412  
 <211> 350  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-B9  
 <400> 2412  
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 cagtcataga cagagctctt actaaggcaa attgagaatt ccaaactgga tagagctcca 120  
 tgttttggaa tagagcacag cccttactct cctcattggg tacacaatag aatctttcct 180  
 tattcagata gaaattttgc taagtgcacg atacaacaag tgaagttcgc gaatttccgg 240

ctctaattcc atctctacat tttctgtaca ggggtggataa ctagaagctg tcttcattcg 300  
ccatgaagtg tccactatgt cacgtaacta tctatttgag tgattcggat 350

<210> 2413  
<211> 169  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-048-Q1-E1-C1  
<400> 2413

gacgacgcgt ccgaccacgc atccgcgatt gcctgccttc tctcgacact cgttggtttg 60  
tcctttgaaa acacgtttta gagtcattcc aatggctgca gtaaccttta agagacagaa 120  
gactgacgta cctgggtattc tacattgaga aaatgctctc aacagcttt 169

<210> 2414  
<211> 179  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-048-Q1-E1-C11  
<400> 2414

ggacaagagc gaagtgagtc cagctttgaa tgtgctttat gaacactatg aacacgctgt 60  
gcctgattct ggccgatcag caaatccgcc tgacgggttt ctccagttca agtcagagct 120  
gttgatagt actggtgata tgctacttgg gtaagctgtt gtttatgtct attttcatg 179

<210> 2415  
<211> 342  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-048-Q1-E1-C12  
<400> 2415

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aaaaaaaaaa ataaaaaaaa aaattgaaaa gaaacaacaa aattaaaaaa aagggaggac 120  
gcacaaaaag tttccaagct tacttaaacg tgctggccaa cttaatgctc ttcgaaaatg 180  
tgaccctaaa tttcattcat tggccttttc ttttaactcc ccgggttttg gataactcgg 240

gctttatcta atttaccgg cttggaacac atctgccttt cccaactgt cttttttttt 300  
aacaagtccc cattttttcc tcttcccaag aatttttcag cc 342

<210> 2416  
<211> 416  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-048-Q1-E1-C3  
<400> 2416

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agggtaccgg aaataagtcc cccaaggga aattaaat cctaattaac caataaaacc 120  
caaggtctca aggaatttca aaagtttttt aaccanactc cgaaactcgg taagccgaac 180  
tttgaagaaa accaactccc tatggagaaa atgttgtctg tccaacgatt ggccgcttcc 240  
caagctatct gagagacatt tcgtaattct gccagaatt tcgggttaaa atccttgga 300  
aaaatccatt ggtcctttta cttccccaat ttgaaatcca agtgcgttaa ttgccaat 360  
taattgtgtc ctctcctcct agaccctggt atttagtaga atagatatag taatac 416

<210> 2417  
<211> 369  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-048-Q1-E1-C5  
<400> 2417

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gcggtttata aaaaagtagt ttcgtgagaa aacgcaagag acacctaata ttagtagaag 120  
accttgtaat gtttcgggtt ccaagcgagt ctgaagttac cggcgaaaca acagattctc 180  
ctagcttaca agtgtcttct cacggaacgc cttcgaccct tcatagtctc ccggaatctt 240  
cttatcatga gtattacgtg aagcataagt attcactgta tagaacggga ctgggtcgaa 300  
aacacttgtc agatcccaat tcgactcatc aatcttcacg ggttgagct tatatacatg 360  
ggagccacg 369

<210> 2418  
 <211> 313  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-048-Q1-E1-C8  
  
 <400> 2418  
  
 ggtcgaccca cacgtccacc cacgcgtccg cccacgcgtc cgcccacgcg tccgattttg 60  
 tgttgttgtg tagtgatgga tagggactgg ggtgcaaaga caggaggtgg aggagttgcc 120  
 tccaaagaac aaacagatat ctcaagaaga gaaaggttgc gtcaacttgc tttggaaacg 180  
 atagacttga aaaaggaccc ctattttatg cgcaatcact tgggaggcta tgaatgcaaa 240  
 ctgtgtctaa ctttacacac taacgaacga aattatttgg cacatacgca aggaagaaga 300  
 catcagatga acc 313

<210> 2419  
 <211> 113  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-048-Q1-E1-C9  
  
 <400> 2419  
  
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 gggcgtggct accatcgata tgcttcgagg agctggaagc gggctttgat ccg 113

<210> 2420  
 <211> 401  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-048-Q1-E1-D10  
  
 <400> 2420  
  
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 attctcccc caaattcttt cgtaaggcgc aatcctaagg gaaatatggg cgggtgttgc 120  
 gcggagtatc aagtgcctac taagcaagtg gtgagcttgg gacatcncga agcactggga 180  
 ttggctgggt ttgctgcaac cgactttatg ttgagttgta tcaacgcaaa gttgttacct 240



agcagtatga caaatagtat tatcgactt ggtttctttt atggaggttc tgcgcagctt 300  
attgccggta ttatgacctt tgtaaagcag aatacgtttg gtggagttgc attttcaagc 360  
tacggtgcct tttggttaac ttttggagtt cttataacat t 401

<210> 2421  
<211> 313  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-D12

<400> 2421

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aactgttact cattcagctg accacaaaga tggccttaag gattctttga gaaccactca 120  
aatctttcga aattcagaaa cttatcgtaa caaggacgac atgctgaaag ttgaagttat 180  
acccacact ggcctaccag gtggaaagca tagacctcgt gcctctcctt gttcagctat 240  
ggagaatgtg atgaacaaca ataatgactg gacttgtact gctaggaatg cttcattcga 300  
gatgcatagt gtc 313

<210> 2422  
<211> 138  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-D4

<400> 2422

acgcgtccga ttccgagttc gcatgcacct agtcgtcgtc cttgtgattg cagtattccg 60  
aattcttttc agagatactg tgatcgatcat gtatgtgctt gcctatcag ctgttacatc 120  
acatccaagt atgggatt 138

<210> 2423  
<211> 400  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-D8

<400> 2423

cccacgcgtc cgcccacgcg tccgcgttgg taagcaaaca tgggagccta caagtatatg 60  
 caagaattgt ggagaaaaaa gcaatctgac gttatgcgct ttttactccg cgtcctgtgt 120  
 tgggaatatc gacacttgcc ttcggttcac cgagcttctc gtccactcg tcccgacaag 180  
 gcaagaatgc ttggctacaa agcaaagcaa gggtatgtaa tctacagagt gagagtcctg 240  
 agaggtggta ggaagagacc agttccaaag ggtatccaat atggcaaacc taagaatcag 300  
 ggtatcacac aactaaaatt caagagacat aagagatcag ttgcagaaga ccgagctgga 360  
 agaaggtgcg gaaacttgag agtcttaaac tcgtattgga 400

<210> 2424  
 <211> 341  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-E10  
 <400> 2424

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 gtggcctcgc gtggttcag tttgttctt tgggatattt gtttaatttt gatcactaca 120  
 agtgaaaact actcttcgac agagaaactc cctactataa ttcttggtta aataaaacta 180  
 tttattccta cacttcttta taaaaaaaa atcaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaagaagaaa acaaaaaaaaa aaaaaaaatt aaaaagaact tatctgtaaa atctcaaacc 300  
 ttctaaaatg ttacctcaaa agatattcac ttgaccaacc t 341

<210> 2425  
 <211> 192  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-E11  
 <400> 2425

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 ttgcacacgt agtacctgta tgctcacttg ctgctttgat cttattccgt tcacccttga 120  
 tgagagttgc tctttcgagt tttggatgcc tattaagggt cttcctcact tacatttacc 180  
 cactcctgca ct 192

<210> 2426  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-E12

<400> 2426

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gacaaacgtt ctttagcttc tacttgtgct cacatcttgt ctattttatt tgcgtttgac  120
gcaacctacg agttggaacc tttggatttg gtgattcagc agtgctccta cgtggcagac  180
tggttgagta gtaacttggt ggacaatgag tcaactccgg aagacttccg tcttgccgtt  240
ttgtcttcgt tgtgtcagtt cgttcgacat gacagaccaa gacttgcttt tgctcgaaa  300
gataacataa agaatctgtc ttatgtattg gaaaataaca agcaagagcc tgtttcaatt  360
atttataaga caatctttgt gttttggatg ttatcttatg cacacagtgc tgaggcaaaa  420
cagt                                              424
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<210> 2427  
 <211> 363  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-E2

<400> 2427

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gtggttgga ttccacgact tgcggaaagc tttgggtgaa gcacgcatta tgtagtctc  120
cgttttctac tgtcacaggt ggagatgtag ttgtaaatcg acatcgactt atctgcagct  180
gcaagtgagc agattgctcg taatggaaca ccatggatgg tgagattccc gtttatctcg  240
tttctttgta tggaagctgc gctacgatag ttcttgttgt ggagtctagt tgtttggtac  300
tacagcctta attttgtggg tgttacaact catcctaggc tatatacgta aagttagacc  360
gat                                              363
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<210> 2428  
 <211> 69  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-E3

<400> 2428

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gttttaatt 69

<210> 2429

<211> 380

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-E5

<400> 2429

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aacaagccta caaacggagg ttgaagttga agcgggaagga agctcagaag actcgagtgg 120  
aagagaataa gcttttatct gatcccggtg aagatatgtt tcgttcctaa tggttatagct 180  
gtagactttg tgtgtccaat acacctaact ctatagagct gtaaaaacaa atagcgtttg 240  
caactaaaaa tgtaaaaact acaaaaataat aaaaaaaaaa tcaatgaaaa gtaaaaaaca 300  
aataaaaaat aaagtaaaaa aaatggagag tcctaactgt aaggatccaa aggtaaacaa 360  
aaaaaaaggg gcggccctca 380

<210> 2430

<211> 407

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-E8

<400> 2430

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tattcttttg aaactccaat cggtatatct attggtattg gtattgcaca cacttatcag 180  
gaaaactcct cggcatcttt gttaacgaga ggcatttttg atgccatctc cggtggaatt 240  
ttaatatata caggattggg ggagttgttg acttattggg ttacgcgcaa ctcgaacttt 300

ttaagacgca aagccatacc tatttttagt attgtgggat ttgtctggtt aggagccatc 360  
 tgcattggcga ttatccgagc ctgggcctaa gaataaaatt gtttgag 407

<210> 2431  
 <211> 286  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-F3

<400> 2431

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 tattggaaca cttgaacaac tgtcagacaa caagttgtgt cccagagta tctctagtca 120  
 agaccgcgcg gaaaaaacac ttgcagcaa caagtaccgg ttctaaagct aatctgaaag 180  
 aagaagcagt agagactaac acaagatggg acgctccgcc tggcaattgg gaagagcacc 240  
 cgagtcgctc aggttccaca ttttccgaga taaagttgcc aaagca 286

<210> 2432  
 <211> 212  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-F4

<400> 2432

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 tatccatcgg tatctccaag ttatactcct tcagcatatc aaacaacttc tgcttattaa 120  
 agagccgaag actggataga tttttgaagt gtctcgtgtt caaagaaaac atgagacatg 180  
 aagcacacag tataggattt ggtttttacc cg 212

<210> 2433  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-048-Q1-E1-G10

<400> 2433

gaccgacgcg tccgagaaaa tatcaagtcg aagatacaag acaaggaagg tattccccca 60

gaccagcaac gtttgatttt tgcaggtaaa cagttggaag atggtcgtac tctctcagac 120  
tacaacattc aaaaggagtc tactcttcac ttggtcttac gtctgagggg tggaatgcag 180  
atattcgtaa agactcttac tgggaagacc atcactcttg aagtggagcc ctccagatact 240  
attgaaaatg tcaagtcgaa gatacaagac aaggaaggta ttccccaga ccagcaacgt 300  
ttgatttttg caggtaaaca gttggaagat ggtcgcactc tctcagacta caacattcaa 360  
taggagtcta ctcttcactt ggtgttgctt ttgagatgtg gctgttaatg agttttatcct 420  
gaagttgttt tt 432

<210> 2434  
<211> 451  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-048-Q1-E1-G12  
<400> 2434

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gcttatatcg aaagaagtat tagaatctca aatcatggaa atgctagaaa gagagaacta 120  
tgaaggagca tttctcttgg ctctcggagc tagtaatttg gacgtcgtag aatgggtatg 180  
tgagaagttg gattgccatg aattgtttca atctgatgag cctcccttgt cacaagtaac 240  
attgctatct cttattcagc agttaggggt tgaccttgaa agaaaaacag aaatgaaaat 300  
ggaatggctg aaagaagccg tcatgttatt ggagccttca gatgaaatga ttcaagacta 360  
tttttcagat attttgcata tggttggtgca gaacttgga catcttctag aagctgggtt 420  
gaataattct cgactttcag ttcatttgca g 451

<210> 2435  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-048-Q1-E1-G7  
<400> 2435

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tacttgact cttcagaata tgtcaagata ccacaaggag tatcgggtgga agttcactct 120

agaaaagtaa gagtaaaggg tcctcgtggt gtttttagtaa aggatctttc tcacgtcaat 180  
 atggaaatga cgaaagaaaa gtccggtaag agagttcgtg tgactgtatg gcatggctct 240  
 cgaaaagatt tggcttgtct caacacagtt tgcacgcata ttaaaaatat gatcaccggg 300  
 gtaaccaagg gctatcgata caaaatgcgc ttggtatatg cacactttcc tatcaacggt 360  
 actgtgtctg ataatg 376

<210> 2436  
 <211> 356  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-G9  
 <400> 2436

gcgtccggtt gacagagtgt gttgataagt gtgagtatat taagtgagta taggaaggag 60  
 aagggaaagtc aggagcagtt gttgataatg gaagggatac tgtagagtt gtttagtgta 120  
 agagacataa tacgatttta tataagttat aagggagtgg agtgagataa ggatggacga 180  
 ggagatggta atgataatag catgtatggt agtccattgg agcaatttga agtggatatcg 240  
 ctgtataaga tggagataga aggaagggaa atagggataa gtaacatagg agtgtatata 300  
 ataatgatga gtatagtatg ggtaaagaac atgaggaaga aagaggcata tacggg 356

<210> 2437  
 <211> 449  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-048-Q1-E1-H10  
 <400> 2437

accgtccaa gtcgtatgac gttggtgcct cattaagcca tcgttgaact acatctttta 60  
 tctctttag cacaaacaca aattaaagaa caatgcgtga ggattttct ctacatattg 120  
 gtcaagcagg tgttcaagta gaaactctt gctgggaact ctattgttta gagcatgggtg 180  
 tcaacgctga tggaaccatt gataaaaagg gaaacacagc atacgaagaa gcttttggtg 240  
 ccttctttac ccagacaagc tcgggacgat atgttcctcg ttgtgtattt gtcgacttgg 300  
 aaccttctgt cgtagatgaa gtccgtacag gtgcctaccg ccactcttat catccagaac 360

aacttatttc cggcaaataa gatgctgcaa acaagtatgc aagacgacat tatactattg 420  
gaaatgaaat agtcgacctt actttggag 449

<210> 2438  
<211> 426  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-048-Q1-E1-H12  
  
<400> 2438

ggaagacacg ccagttacaa tcctctcaat ctatcggtga cggatgattt cacctttcca 60  
tataaacaag tgagctatat actgcaagat cacggcagca atggagaaga tgaagaagaa 120  
tcgcagcttt tttcgtcttt cggggtagca gagcctcctt tattttccat gtcgttgcca 180  
gtagtacaaa ctgctactag tgcgttgga agcgcggtga tgcaagaaat acttcgacaa 240  
gaaagttttc atctgcgtgc aagtgaccca acgataagcg atgaattatt tcaatccata 300  
gttactcgag aaaagagatg gagtaggcgt ctatggagaa actttcgacg acaagtttat 360  
gagagacgtt gtcgaataga agaagcagtc gttccggttg ttgctcatag tgctgcgatg 420  
catctt 426

<210> 2439  
<211> 335  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-048-Q1-E1-H2  
  
<400> 2439

acgcgtccgc ccacgagtcc gctagtcgac gagaaacaga ttcacttatg tattttgcca 60  
ttttggtgat tgttggtact tatggataac caaaaacaac acaaccatta ctcttggtgt 120  
tgctgcaatg ctcaccacaa ccaaccaacg acagcgagtc gttgcaacgg atgttacgtg 180  
acgaatatc ttgtgaagag tgtggttgga catttgagc agctgaatcg ttgtctgttg 240  
cgagttcaag agttgttggt gttggacaag gaacacgagt gaatgaatgg tgcggcaagt 300  
taggagaatg ccacaatacg gagacgtgga tatat 335

<210> 2440



<211> 281  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-048-Q1-E1-H4  
  
 <400> 2440  
  
 catcagacgt cgaatggggtt tctggacccg cttacttagg gaaacgaaaa gagagcataa 60  
 ttccagcaac acacgggtta acttaacgtt accttttgcg ctatcagacc gtagtatata 120  
 tgccaaggct ttggagtctt tttattatgt ctattccacc gttgaagaag agtttgaccg 180  
 tcaaagaaga aattttccca aaataggggc gctttacttt gaagagctgc gaaggaaaaa 240  
 ggtatctcta gaacaaaacg tgctttttca atactaaaac t 281

<210> 2441  
 <211> 367  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-048-Q1-E1-H5  
  
 <400> 2441  
  
 cccacgcgtc cgatcaaagc tagtgatagc tgggtactcct cgaaagctat ataagtagcg 60  
 tatgcaggaa agaagaaggt aaaggaagag aaggaagaag cagagagggga ctatgagcga 120  
 gaaggtggat agtcgagagg gaaaaagccc agaagccaag ataaggtatc aaagtaaaga 180  
 aagaaggaaa aggagaagaa gagagggtag gcttagaagc agcaaaccag agaggaaagc 240  
 gttaaagcat gaaagaaaag aaatccgaaa aagaagagaa aaaggtaaga aagaggaccg 300  
 aatcagggta agaggtanag gagcaagaag agaagagaga atgctgggtg gagtagcgaa 360  
 acaagag 367

<210> 2442  
 <211> 316  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-048-Q1-E1-H8  
  
 <400> 2442  
  
 aacctcaagt ggatcatccc acgttggttaa agatagactt gtctcaaggc agctttaaag 60

tactccaaga ctgtgacaga gatttagaat gtgatcataa taccaagttt cagttggaac 120  
 ttattcagta tggctctctt tcacctggtt ttggacgag agaaaatgtt ctgctcttct 180  
 atttgagct cgtgtcaggt gtattcataa aggacactct ctaccttttc caaaacaaaa 240  
 ggtaaagaac atttgtttgc gagtttaatg ctgttggttg agacacaagt ttcaatggat 300  
 gccaacatta aaacaa 316

<210> 2443  
 <211> 341  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-A1  
 <400> 2443

cggacgcgtg gggtctggtt ggatttggtg tgtctgcgtc tgttggtgctg agtcgagttc 60  
 ataaatggca aacgagaacc agggagaggt agagacatat gagttccagg cggaattaa 120  
 ccagcttatg agccttatca tcaatacttt ttacagcaat aaggaaatct ttttgagaga 180  
 gttgatctct aatgcctcag acgcactcga taagattcgg tatcagctct tgactgacaa 240  
 gtcagttctg gaggcggaaa acttgagat tgaaatttac gcagataaac agaataagac 300  
 tctaactgtg cgcgatacag gagttggtat gactaaggca g 341

<210> 2444  
 <211> 374  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-A10  
 <400> 2444

aaaaaaagag aaaggaaaaa actgagtatc aggaagaaaa gagggagtat atgaggaagg 60  
 aaagatcaag gaagtgagag tgagagaagg agtaatgtga atgatcgag gaaagtaatt 120  
 gaagaataga gtggaaagcg cgtaccattt gcataatgtc ccagcgagtg aaaaaggaag 180  
 caaaagtctc gaggaagaag tagccatgta acgatcgaag ctaggtgatc ggatgctgtc 240  
 catccgaact aaggcttagc caatctctgt ggacaaagat gtggcagaga tggcaaatg 300  
 ggtgacaggc tactcagagc tagtgatata tgggtactct cgaacgctgt ataagtagcg 360

tatgcaggaa agaa

374

<210> 2445  
<211> 404  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-049-Q1-E1-A12  
  
<400> 2445

atgatttgat tcttgcgtgtt gctttgaaga atactaaaat gaatggtgcc ttaatgaaac 60  
gtttcggcag cagacaccct gaggaagtg aggctgtttc gaggcgcaact gttgcacaag 120  
gagacggagt tccaaaggta ttgtcgaatg acaaaaagca actgccgcaa gacgactcga 180  
tagaacatct catctcaagt gagattgaag aatatcagaa agtgccatgt taataaattt 240  
ggatcttggt caagtcgtaa aaaaataaaa aataaataaa acaaaaaaaaa aaaagaaaaa 300  
caaaacaaaa aaaaaaaaaac aacaaaagcg atccatcaaa aatgatcaaa gctaaaataa 360  
cctatccaga aaaccacata aataaaaggg ggggcccccc aaaa 404

<210> 2446  
<211> 354  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-049-Q1-E1-A3  
  
<400> 2446

catccagaac gctctaacct ttaaatacat tgagcatggg caatggttgc aactaatgcg 60  
ctgagttgca tctctcactc tttccttata gctgcagcag ttgcagccga cgtattttca 120  
agaggataga tggggatatg ctcaacagac acaacaccag catcagtgcc aacaagtatg 180  
tttacagtat gcatactata acagtccagt ctgcactttc gtaaccacac aaagcccata 240  
ctggacccaa tgctcgaaga ctgtgcaaaa ctttgtccca agccagtgca gtacgtatac 300  
ccaatctcct acatggacct attgcagcac ctacaccacc actagcgtac catc 354

<210> 2447  
<211> 288  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-049-Q1-E1-A5

<400> 2447

gctcatacct taaattcttt gaggattggc agtgggtgcg acttatgggc tgacgcgcaa 60  
ctctaacttt ttaagacgca aagccatata tatttttagt attgtgggat ttgtctggtt 120  
aggagccatc tgcattggcg ttatcggagc gtgggcctaa gaataaaatt tgtttgagac 180  
gtcgtggtgc agatgactcg catgtttggt agttggttca agtttgacaa gagaaaacat 240  
ttgttgctac ttcttacaaa taaaaaagtt caaggacaaa ttgttagat 288

<210> 2448

<211> 335

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-049-Q1-E1-A8

<400> 2448

aaaacagagt gacaagaaga gatggcaagg agaattattgg gtgcttatat gggagatgcc 60  
acagtggcaa ctctgttcag tatcaaaatg ttgttctatc ttactatcat gggtttctcc 120  
ataactatct tggctctcat gggaaagaac tcggatggta tttggatata tagtgtgcca 180  
cctgcagatc aatattgtgc atacaagtct tcattggagg tgaaccacca tggaattgct 240  
tcctattgca agtatatcgt tgccgtagct gctattgggt tggttatctc gtttttccag 300  
ttttgctacg gtctgttggg tatctttttc aagtg 335

<210> 2449

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-049-Q1-E1-A9

<400> 2449

aaatataatg aaaagattta ttctttattt gcagaattat ttgaaagttt tcctttggga 60  
catttggtga tgggagaaaa ggagaaccaa cgagtattgg taattcatgg tggattattt 120  
agtcgtgatg gggtaacact agaagattta caaaagatag atagacatcg agaacctgac 180  
caaggtctca tggcagaatt gttgtggagc gatccacaaa aggaattagg attaggagtt 240

tcaaaacgag gaattggagt atcttttga ccagatgtga ctgcacgatt tttagatgcc 300  
aatcggattg ccttgtagt aagaagtcac gaaatgaatg aacaaggata tgaaatagaa 360  
gcagataata cattgattac tgtattttct gtcaccaact attgcgacca aatgg 415

<210> 2450  
<211> 338  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-049-Q1-E1-B1  
  
<400> 2450

ttttgactga aacatgacgg aaagcgacaa gtcagtgcct gttgtcttct cagggtccatc 60  
tggagctggg aaaagtacta tcatacaaaa gctgaacaaa gattaccctg atccaatagg 120  
atttaccgta agtcacacaa caagaccacc gcgaccgggg gaacaaaacg gagtagaata 180  
ccattttgtt tccgaggaaa aatttaaaaa aatgatagag aatagtgaat ttatagaata 240  
tgcgaatgtt catggaaatt attacggaac aagttttcaa gcagtaaaga gtgttctcaa 300  
tagaggaagg ctgtgtgtgc tggacgtaaa cgttcaag 338

<210> 2451  
<211> 409  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-049-Q1-E1-B12  
  
<400> 2451

agaattatcg gtttgcatac gatggctttt actcctctgg aggaagaggt tttcgaggta 60  
gaggtggccg tagaggaaga ggtagaggca atggaatata caagtttggt tctcgagggtg 120  
gttcatccgg tggtcgtggt ggtagagggt gcggacagaa acgtggcgga atgaacggcg 180  
gttccaaagt ggttattgaa ccgcatcgac atgctggagt ttttgttgca cgggggaagg 240  
aagatgctct ctgtaccacg aacttggttc ctggtgagtc cgtatatgga gagaagcgca 300  
tctctgtcga agtagaaaat ctcaacgata cttcagttat agagaagata gaatatcgag 360  
tatggaatcc atttcgattc aagtttagcag cagctatttt ggggggtgt 409

<210> 2452  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-C10  
  
 <400> 2452  
  
 acccacgcgt ccgcccacgc gtccgcccac gcgtccgcga ctcacaggcc tggatggaat 60  
 ttgtcgatca ttgtcttttg gaatctaggg attctcatatc agcagacagt ttagtcgact 120  
 ttgtgtcatc tgtatgtctt ccctgagact tgtcagttct ttaggaatag aacctcctat 180  
 tctttcatgg agtaaataga aaatgaagta aaaggaggga atgaaaggaa gttatggcac 240  
 aaacacgtgc catcagcagc ggtaaaacgt gtgtagcaag cgtagagcaa atcaactggg 300  
 tgtacaggtc gagtactaga gtaagtgtaa aatggatagg atatgacaga aagacgaatc 360  
 ggatgaaatg cacagatctc t 381

<210> 2453  
 <211> 186  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-C12  
  
 <400> 2453  
  
 actgacgcat aggttgatgg gtgttgtgag tggatcggta agaattgtta gccgtagtgtg 60  
 acgctcccag ggtgcgaggc actagtgccca cttgattgag cacaggcaaa gttaaattgc 120  
 aagcttgatc aagtcaagta tgcataagat gtgaacaatc agagatagtt cagtgttagc 180  
 tactgt 186

<210> 2454  
 <211> 333  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-C6  
  
 <400> 2454  
  
 acccatgcgt ccgcccacgc gtccggatgc aacattaaca aaacgcggat cgactgcaag 60  
 attcgtctcc agataagctt gtaagtagta tgccatagcaa ggggaatagt tcttagacgt 120

tcactaggtg aaagaacagg aagatagttt aagacgaaag tacggtaact tgccggataa 180  
aaagcacctt ctccagcaac tactcaatgc gaaccacatg cactaactaa aattttttga 240  
ctctgcagac gcaacttttg ccaaagtagg aaaggaattg gcctaagaag ttggcttgga 300  
atatgcctac ccaaactctg aggatgagtg ctc 333

<210> 2455  
<211> 352  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-049-Q1-E1-C7

<400> 2455

accacacgt ccgaacatga cctcgttcaa gtaaagaaac agctctttca atcgcttctg 60  
ataaaaagaa aaatgcaaca agagatagag ctgaaaaaat ctaggcggac gcgctgaagg 120  
atacgttctt cattaagcgt gcaagccacg tcgccagatc ttccaagctg tgcccccggt 180  
tcatttcagt gggcgctcgtt ctttgacgtc gtaatgggca ctgtccgtac gttactcaac 240  
gtaatctctg tgcaattgat gctcatttcg cgagtcgggtg tcttaccgaa taggtcctct 300  
acgtttggtc tgccatacag ttacccttgt cgaacggcta ttgggacacc cc 352

<210> 2456  
<211> 244  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-049-Q1-E1-D11

<400> 2456

aattatacgt acgtacccaa ttgtcggcaa ggcttgcaaa gttttcccat ccttttcata 60  
tacttctggt acagtatcac atcgcttgta tttcaagatg aggtcttaca tcaagtgact 120  
gatgcactca aattggaact ttctaccta tgtgaaggat accgccgatt gcaactttac 180  
tggaatatc cttgggttgca aagaacgatt ggaataggct ggaattactc ggtaacatac 240  
gatg 244

<210> 2457  
<211> 233

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-D3  
 <400> 2457  
 cgtccaacca ctagtcagcg tcatgaccgt tctggaatgt aagtgctgtt tgggtgattgc 60  
 acatccctct actggactat cgtttgaaaa acatgtcgct gcaccttttag gtgcacatgt 120  
 caggtgtatc cgaagtgaat gcaatttggg accagatttt cgggttaggc atcgtttagat 180  
 tcgctgaagc cacagcggga gatcatctat acacgccgtg cccttatacg gga 233

<210> 2458  
 <211> 336  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-D7  
 <400> 2458  
 aggtgattgg aacggctctg gttgtcacac caacttttct acaaagccga tgagagagga 60  
 tggcgggttac aagaagtata ttttgccagt gatggaaaag ttaaaggcaa aacataagga 120  
 acacatcatt gcatatggaa agggaaatga aaagagactt actggaaaac atgaaacggc 180  
 atccatcgat agttttcttt atgggacagg aaatcgtgga gcttcagtta gaattggcaa 240  
 tcaaacagca aaagatggca agggatactt tgaggatcgt cgtcctgctg cgaatatgga 300  
 tccgtatatt gtcaccatgc ttcttgtctc tacttg 336

<210> 2459  
 <211> 155  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-E10  
 <400> 2459  
 acccacgcgt ccgcgtatat cagaaagtca gtgcaaggaa taaaaaaaaa aaaaaataa 60  
 aaaaaaaaaa aaaaaaaaaa aaataaaaaa aaaaaaaaaa aaaaataaaa aaaagaaaaa 120  
 aaaaataaaa gggatggggg tggagctcat gaggt 155



<210> 2460  
 <211> 319  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-E11  
  
 <400> 2460

cccacgcgtc cgaaaagaca gagaagtgag acaataccat cgcagccgta ctgaacaccg 60  
 acacaggtac tcgaggagct ctgacactgg ctcatggtta gaacagtgc gatgagggaac 120  
 tatgcatatg gatatcgtat ctgcgggtcga acctatgata caatcagcat ctatgggttta 180  
 gcatacatag agcactctgc acaacagaga aaatgtattc tagaaagtgt gcggcctgtc 240  
 acatagtaga gaagacatcg atgatactga cagcgagtat atgatgaggt acacacaata 300  
 gctgtcctaa ctgtcatga 319

<210> 2461  
 <211> 336  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-E5  
  
 <400> 2461

agtggatttg ttgcaagttg gttggtttct ggactttaag gcactctctt tctcttgttg 60  
 gtgtgactgt tgtagatat tgtgaaagat gggagtcaaa gttggtatta atggggttgg 120  
 gagaattgga aggctagttc ttagagctgc tttggagaaa cagtctgtag atgtggtagc 180  
 tatcaacgat ccctttattg atttggacta tatggtctac atgttcaa atgactctgt 240  
 gcacggcgct tatccaggta cagtggtagc aaagaatgga aaacttgtcg tggatggaca 300  
 cgaaatggca gtgtttgcct tccgttgacc tagtga 336

<210> 2462  
 <211> 246  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-E9  
  
 <400> 2462

agaacacgctc gagcaacaaa taagactgga ttcttcttgt agagtaaagc gacaataaaa 60

ctatatattggt agtcacgctt gttcaagagg gaggcacatgag gattctcgtg tggaagatt 120  
 gatgacagaa cttcagcagt tgctaagata gacttatgac catgtatata tgatgtgaca 180  
 atacacatat gagacgttta ggtaactgtt gatgcatgtg atgtttgtac attagatgat 240  
 caaaag 246

<210> 2463  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-F5  
 <400> 2463

gacccacagc gtccacccac gcgtccgccc acgcgtccga tgaaagggat gaaatgcaga 60  
 gatctctaga gaaaggcaag aaagaaaaga aaggaagaca cagtaaataa ggcgagaaag 120  
 cataggaagt gaaacggatt aggaacccgt gtagtctatg cagtaaaaga aagaatgagt 180  
 aagaaaaaag ggagtcattc caccagggga gtaaaggcgc aagaaagaaa ccaaagcaa 240  
 ttgacgggaa tcggaaaaag gggatgatca cgtacattaa tccgatataa accgagaacc 300  
 ttacctctcc aagaaggtgt tgcacggctg tcgaaagaac gtgctgtgaa gtgag 355

<210> 2464  
 <211> 315  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-F9  
 <400> 2464

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 agatgcgttc gactattgat ggtcgcaacc actttgtgat atctgcgggt agacgttccg 120  
 atctctctat gcggaattca taagacgaac gtgtggaaga atagttgcac tttgctaacg 180  
 gaaagtttgt aaatcactcg gttcgatta ccacggaaca taatgaagtt gtgttgccca 240  
 agataatctc ttggtatagt gatgacgttc ctaggactgt gcattccttg ttgcgttggg 300  
 ttataactaca attgt 315

<210> 2465  
 <211> 415  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-G11  
  
 <400> 2465  
  
 aggtgaggtg ggaagcaaga agagatgagt agaggaagta gtgccggtta tgatcgacat 60  
 attactatatt tctctccaga gggacgacta tatcaagtag aatatgcctt taaggctgta 120  
 aagtcagtag gaattaccac cgttgctgta aaggggctgg atgcagtttg tggagtaact 180  
 caaaagaagg ttccagataa gtcattgac cctaaatcag tcaccaatgt tttccgaata 240  
 tcggatcacc acggctgtat tttcactgga cttgcaacgg acgcaagggc acaactacaa 300  
 cgaacacgat cggaagcagc agatttcaag ttttaagtttg gatacgaaat cccggttgac 360  
 cagatagcga aaagattggc ggacatcaat caagtttata cgcaacacgc atata 415

<210> 2466  
 <211> 362  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-G4  
  
 <400> 2466  
  
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 aatcggttca agtcagttac tttttggaga gcttcttgcg gaagaaggag agacatatcg 180  
 tttcactgta ttttattctt gtgaaaaggc aagaagtga ggaattattc atccaaaact 240  
 tgtcttaaac tttccacctt ttcaacctgt aaagcttgaa tggaggaagg actgcggtgg 300  
 aatgctggcg tcctctatat ccgtaggaac tacatggcat ggaagtgata ttatcaacca 360  
 ag 362

<210> 2467  
 <211> 339  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-049-Q1-E1-G5

<400> 2467

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aatagacatg ataaggagat cgtcagcagt catggggtttt cacagaatca gcttatcgta 120  
tggaatatc cttcgatggg aaaaattgca gagttaactg gacacacttc gagagtttta 180  
catttggtg caagtcctga tggtaaaca gttgtttctg gcgctggtga tgagacatta 240  
aggttttgga gaatttcga ggcagcagaa tcgaagctgg attcttccag taagacatgg 300  
agaagttcgc aaaagagtat gatgaagaca tgtaacatc 339

<210> 2468

<211> 358

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-049-Q1-E1-G8

<400> 2468

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tttagatccg tttgcttgta tgcagtggca ttagaaacca actttatcgt ggatgaacaa 120  
gttttgaga actgtataga ctatttgtgg aatgataatg actgtgttgg aaaggaggaa 180  
ataggagata tttcgaagaa tacatatcgt cttcccattg cttggacgat tgctcaacgg 240  
ttaggaatat cgctccattc atttcatttc attgttagtg tttatcctgc aaaaatattt 300  
ggactacatt gcaaaggaaa actggaaaga ggttatgatg cagatatagt cgtttggga 358

<210> 2469

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-049-Q1-E1-H11

<400> 2469

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tcctagaaat aagcttttgt tagggaaaag acaacattca tgtaaacatc cgagtcacaa 120  
tagttatata aagtatcaag atgctgcttt caagtgcttc cactgcaag caaaggaaga 180  
tggccaaaag ggaggtggaa agttcaatcc ttttgcggca cttggaaatg ttgggaactt 240

tatggacgcc gtgaagaaag cacaggagtt ttcaaaggaa gctggaaaga tgcaggaaga 300  
 gttatcaaag acagagctga aagcttctgt aagtatttga acaaatacat gtttctttga 360  
 ctttggaac tagtcagagg acggtttggc ccacgcataat ataac 405

<210> 2470  
 <211> 358  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-H2  
 <400> 2470

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 ctttcaagtc gtttgagtac ttggaaacag gggtacaaga ttgtaactgt tgcaaataat 120  
 tttgaacgag aaagaggact gcgactgggtg agttccttcc aaagtgcgcg gcagtggact 180  
 tcgttgcaag gtttggttatg tcgctataga agtgacagcg ttgtggaggg agggaaaaag 240  
 caaaagggag tcgctactga aagaagtcct gtttctacag ccattcccat gggttatgcc 300  
 gatgaatttt ccatcacgtg catcgttggc gtccaggaga tccaagtaaa cgaacggt 358

<210> 2471  
 <211> 335  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-H4  
 <400> 2471

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 tgataagtta caaagtgtca aagcgcgaaat agaggaagtc gtacagaaat atgaggcaac 120  
 aagacaagag gcaatggaag caacgcgaag gttccaaaag attcgtgacg agcgaaggaa 180  
 gcgttttctt tcatgtttca atgtagtctt ttcgaatatt gatagagttt acaaagaact 240  
 tactcgaaat tcagtctcgc agttgggtgg cactgcttat ttggcactag aaaactacga 300  
 agaaccttat ttatatggaa ttaagtatca cgcta 335

<210> 2472  
 <211> 376

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-049-Q1-E1-H9  
 <400> 2472

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 tgatacttgt aaagagtgtg gaagtgaacg cttgggtgaa gaccacgccc aaggagacgt 120  
 catatgtaga aactgtgggt tggtagctgc ggaaagaatt gtagacttgg gttcggagtg 180  
 gagaaacttt gaaaacgatg acagcggtag agaccctagt cgtgttggag ggccgagcaa 240  
 cccctcctt gagtcgggtc caagtaccgt gattggagga gtagtatcgg actctaaaag 300  
 tttgaacgca cgtttaata gggctcagaa tagacacagt acttcaaaaa gtgaccgagt 360  
 tttgttggat gcgttt 376

<210> 2473  
 <211> 255  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-050-Q1-E1-A3  
 <400> 2473

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 tatcgctgcc gcagttgcag ccgacgtagt ttcagaggcg agatggggat atgctcagca 120  
 aacccaacaa cagcaacagt gccaacaagt atgtcaacag tatgcatact atcagagtcc 180  
 agtctgcaca tccgtaacca cacagagccc atactgggac caatgctcga agactgtgca 240  
 aacctttgtc ccaag 255

<210> 2474  
 <211> 307  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-050-Q1-E1-A7  
 <400> 2474

acgcgtccgg gtgtcacctg ggtctattgt gtgcattgag tgtaccggtt ccatgcaatt 60  
 aatgaatcac ctcacatgct gtattatcta atctataccg gttagaatcc tatgctaact 120

agattttatat tgacgtgata ctagtgcac c agcttagaga tatatttgct atggcgcaga 180  
gcacagttg ctccattggt aatcatatat gtgaacgtat tacgagtga cttcgtagac 240  
ttgccgctta atctaggcag attcctttca cttctcgtgt cgtacagact gctgtacgtc 300  
tgttgct 307

<210> 2475  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-050-Q1-E1-B11  
<400> 2475

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tataatataa aatggccaaa gtaaaccctg tgctcgtcggc tcctaaacta agtgtaacta 120  
gagagatagc tatcgggtatt gggcttggtta tagcggtaag ttttcacgcc agggctttgt 180  
agagagagag ggagagagag agaggggcgc cacagtagcc aactgcaaag aagagaggcg 240  
tggaatattt tgtggaatac atggaccta ctttggtttc tagtgtgcta tggatatttcg 300  
ccagtggcat ctcgataca cggaaatgat aagaaaatat tatcgcgagt tggatgaaca 360  
agaacagagt tcctcgtcgt cgtgaaaacc gccttggtgt tgtgagatag caat 414

<210> 2476  
<211> 217  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-050-Q1-E1-B3  
<400> 2476

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tgtagtctat gcagtaaat aaagaatgag tacgaaaaac gggagtcatt ccaccagggg 120  
agtataggcg caagaaagaa acccaaagca attgacggga atcggaacaaa ggagtggatc 180  
acgtcaatta atcagattaa accgagaagc ttacctc 217

<210> 2477  
<211> 369

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-050-Q1-E1-C1  
 <400> 2477

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 cgcaacttga ttctgggttc taacttttcc tacgttggtg tgcgaatttt ccttgcaagg 120  
 catagtttta ctgttgaca atttcgttta tgggttgattt ctcttatact cgttgcttgt 180  
 agttatttct tcttacaaga cgccgcaaaa ccaacttttg agagaggagt cctgggtgat 240  
 ggaggctacg acatctccag caaggggttg gatggaatat tgtcacgaga tgatttagat 300  
 ctgttgtttt acagtcgtct gtgccatttt ttccaacaag ttttgggtca cgttgttgct 360  
 gataccaac 369

<210> 2478  
 <211> 351  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-050-Q1-E1-C11  
 <400> 2478

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 gtgcctacta tcaaaccttt ttgactgttt ctggcaagtc agctaatacg tcttcgggt 120  
 tggataagaa aacgtgggat gccatacgta gtgaagtaga gatgcaagtt ggtagtctg 180  
 ttgtagatgt gttttttcgt gtgcaagtaa aggttttttt gtttgcgtgt cgaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaga aaaaaaaaaa aaaaaaaaaa aaaaaaaagg 300  
 gaagaagaac aagagggata agagaaaaga taagggtgta tgaaaagtaa a 351

<210> 2479  
 <211> 281  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-050-Q1-E1-C3  
 <400> 2479

ttcagatatg agacgtgtca agagaccaaa cttttctgtg cggtttaca aaaataagtt 60



tcgtgaagaa aacccaaga acgcctaata ttagtagaaa ccttgtagt tttcggtttc 120  
ctaccgagtc tgaaaatacc ggcaacacaa caaagtcgcc tagcttacia gtgtcgtctc 180  
acgggacgcc ttcgaccctt cataatcccc cggaatcttc gtatcctgag tatttcgtga 240  
aaaataagta ttcactgtat agaacgggac tgggttgaaa a 281

<210> 2480  
<211> 383  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-050-Q1-E1-D5  
<400> 2480

cgtccaagcg aaacaagaga agggaagtaa aaggtaagaa agaggaaagg tttacgagag... 60  
aaggaaagtag aaagaagaga gtgtaaggcg gcgtcataag agaaatccga aaggagtaga 120  
agaaaagaga gagaagaaag aaaagaagag aaaagccgta ctgaagaccg acacaggtac 180  
tcgaggagaa aggagacca aattaagggtg agagaatgga cgataaggaa ctaggcaaaa 240  
ggatatggta tctgcggtag aacatatgaa agaagcagca ccgactgttt agccaggaca 300  
cagcactctg cagaaaagag aaaatgtaaa gtatagagtg tgcgggctgg caaatagtag 360  
agaagaaatc gatgaaagtg aaa 383

<210> 2481  
<211> 452  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-050-Q1-E1-E10  
<400> 2481

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ttatggaaaa tgatttttagg aaaacatcga ttacctcgta catgttgctt tttggctgct 120  
tcaagagatg cctcattcgc tgcagctttt actattctac caaccgctgg agaaccgcaa 180  
aagaatactc caacagcttc cgatcccgga ataaagtctt ctctctcgaa tatatttgaa 240  
aataattggc tccattgcgg tcttccgata tgatctcgaa tttttgagga gttttctggc 300  
agcgagagtt cattgacaac tctgtgaaca aagatatcta tttgaacatc tacaggactg 360

tcttctgaaa ctattcggtc aaagtctcga aagaaccagt gaaaaccatg aactgttctg 420  
 ttgacccaaa taaagtgaag tgactttgat gg 452

<210> 2482  
 <211> 428  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-050-Q1-E1-E11  
 <400> 2482

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 gttactaaaa gcattttgtt atccacagta agtataata gtccttttgca gctgagtaaa 120  
 gcagagatat ggagagcttc ctatccaatt ggaagcagac gttcctttgc agaacaaaag 180  
 gcacagcagc agtccaaaga aggtgaagaa ccaataacgc cttatcaacc tgtgacggag 240  
 aagctggata aaagagaccc aaactaacct tggaagtgga gaagttttct tcttgaacat 300  
 agctacaaac ccaacctcaa tatcaatctg gaaaggcatc atacaccttt aaagatttag 360  
 agatagggta gctcggggga atcgtcaagt ttttaagatt ttttgcgat gccttttttc 420  
 agaaacga 428

<210> 2483  
 <211> 290  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-050-Q1-E1-F5  
 <400> 2483

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 ctagtagttt gttgctcgtg tcgtcaagtg tcgtcctttg atttcatatg cgaagctagt 120  
 tggcaggctg aagacgtttg tttcgaggac gacatagaac aaggaggtgt cttaagcggc 180  
 aactttgatg tggttgaccc tgaagagtcg gatgtcgatg tagagttgga tcgagtgccg 240  
 cgagaaggag ctcccagtg tgagtgggag tggagagggg taaggggggt 290

<210> 2484  
 <211> 332

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-A5  
 <400> 2484  
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 gccaatgtta ttatcgatga acaacaatat cgattgtctt tgaccaatac tgccaaattg 180  
 ttatgcattg ctgcttatat ggctttctcat atttcccca aacgagactc gaagatattt 240  
 acaaagaaat cgacgcgtgt caaaaaacat cgcaggagaa ccaactcatc cactctgaca 300  
 gaagccattc ctttctgttt agaaagactg tt 332

<210> 2485  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-A6  
 <400> 2485  
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 caaaagtttt agattggatg aatgctgatg aaatgttatc gagaggcttt aaagaacata 120  
 tttatgaggt tttccaatat aggccggcac actggcaagt tggcactttt ctccgccact 180  
 atgctgcagg atgtacgaaa aatgacggag aagtttatga gagatccagt tgtgattttg 240  
 gtgcagaaag atgaacttac actggaacgt atcagacaat actatatagc agtggaaagtc 300  
 gacgagtaca agtttgatac tttatgtgac ctctacgaaa ctttgactgt tacgcaggct 360  
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 gact 424

<210> 2486  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-B10  
 <400> 2486

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 ttgcgacgta gttcccagtg ttcacactct tggaggagtg ttctgatgaa ctacagtccc 180  
 tattcgataa ctaccgacaa atcagaagga catattgttc ccggtacttt ttcaagattt 240  
 gagtttcttg aaggctgagt caccggtcca accgtcttga accctagcat acttgacttt 300  
 acagtgtcca atgtttcaga tgctgccttt ggagaatgga gagcaatata ggcttcaagt 360  
 agagcaaaag aactggaaca cagaagaaac g 391

<210> 2487  
 <211> 383  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-B4  
 <400> 2487

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 acttggtttg tgaacgcttt caactttgcg ctttcattct cgtggccttc tatgaaggct 120  
 gcatggggac ctcaaggagg ttctcgattc tatgctggtt tcaactttct tggcatcggt 180  
 atgcagttct tattcttacc tgaaaccaag ggctttacat tggaacaaat gagagtcgtg 240  
 tttagaggagg gtttattcac catcgcagct tatcactgtc gtgctgggtg gagaacactt 300  
 cgtaagcttt tgggacttcc agttccagac actcctcttg tttctcccta ctataacgcc 360  
 tacgtattg accgcgtta gag 383

<210> 2488  
 <211> 95  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-B5  
 <400> 2488

cccaagcgtc cgaatgggca tagatgtcat ggtaaccaag gaaggatatcg tgcaacacat 60  
 cactcttcaa aagacagcct ccaaatgcaa ctttg 95

<210> 2489  
 <211> 363  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-B9

<400> 2489

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aataaacgcc tttcaaaaaa aggcaaggga gtgaagaaga ggttgacaga tccgttttctt  120
agaaaggaat ggtacgacat aaaggcccca gcaatgtttt ctcaacgtca ggttggaaag   180
actttggtta ccaagacaac cggaaccaa attgcttcgg aatcactgaa aggtcgagta  240
tacgatgttt gtcttgccga cctgagtagc aacaaagacg agagtttggc gtacagaaaa   300
attcgtttgc gttgtgagga agtggaaagga agaaactgtt tgaccaactt ttatggaatg  360
gac                                                                    363
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<210> 2490  
 <211> 109  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-D10

<400> 2490

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tgaaaagtgg aatcatactt gtctaccaag aatgtctctt cgtttcaca                109
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<210> 2491  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-D3

<400> 2491

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tccaagaaca agtgcagaaa atgagaaaaa ggaagctata gctaacttag ctgtcatgtt  120
tccaaacttg tcgcgcactg agttatcgaa cgctttggaa gctaatagct attcagttca  180
aagaacggtt gactacatac tctcggaaaa gtcctcctcc tcacccgccg cggcagcaga  240
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agatgcgtcc gaagttgccg ctgcgcatcgc tcaggtagag gaagacgaac gtttagctcg 300  
 tgccttgcaa agcgcttatg aacgggaaaa taatgttgaa agacagacca tgtctcgaac 360  
 gagttgggac tcatcagcag cacaaactcc tttgttgaa aagctcaaat tatacggaag 420  
 agc 423

<210> 2492  
 <211> 84  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-D4  
 <400> 2492

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 tcaacactct ccaagaacac gtcc 84

<210> 2493  
 <211> 201  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-D7  
 <400> 2493

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 gtgtcatgtg tccacagttg tctaccagtg gattagcgag cgcttttgaa ggtgatagcg 180  
 attgagttca aagaagggtt c 201

<210> 2494  
 <211> 231  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-E1  
 <400> 2494

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 gtaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa agacagcgaa gaaaaagaaa gagaaaggca a 231

<210> 2495  
 <211> 120  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-E11  
 <400> 2495

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 tttggacaag gttctatatg cagtagattg gctgtctcat gtgggtcccc tatctgcgaa 120

<210> 2496  
 <211> 211  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-E5  
 <400> 2496

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 tttgcttgaa agaagtccaa tgaaagcggt tcgacaggag cccaacatgg ctctgtgagcg 120  
 tttgcagggt agcaattcac gaacggaagt cgatacggac tagcgctcca gtgcacaaca 180  
 acgcagtcgc agcgcctagt tctgccaccc g 211

<210> 2497  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-E7  
 <400> 2497

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 tgggcgacag tcatcaaact gttctatcag acagtgaaat gctttcctaa tcaagtggga 120  
 aactaccaat tacttgttca gcacgagtga ggataacttg aacaaatcct catatggaat 180  
 gtgacacaac gtatctcaac taagaaacaa tgtgaaatat atccaacaac gtcacttttt 240

attattgaga caaacttgat ggcggagcac aaaacaacca caaaactatt gcgctctgcat 300  
tctatatacct cgcagttgaa atagaaattc gaagcctatt tggagagtgg ccagtttaag 360  
tcattctgttg aagaaaccct ttctctgtca aaccacaaa agcgcataat atgttggttt 420  
tt 422

<210> 2498  
<211> 262  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-E9

<400> 2498

gtcagcacat ttggctggat tccgagagag tgcattggtg caccacaaac gtttgctgaa 60  
gacaagactt ttacgttttt atccttttca atgtctgcag tggaagtcgt acaggtaaatt 120  
gttctaaatg atcctggttg ctttcgagac acgttttggt ttgaaataac ttatgaagtg 180  
agacaagcgt gacaacacga tagtgagtgg aaagtaattt aggtgagttg tgccagagag 240  
gagagtctgg accaagtttt gg 262

<210> 2499  
<211> 358  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-F1

<400> 2499

cccacgcgtc cggcgttcca cagtcgcgag tgttggtgtc tgcgtttaat agtcctctct 60  
agagacttca atataaaata acaaacagtt gtaaaaagct attcactttt ctctatgaga 120  
acgagtgtc aagtgtcacg ggggttttgc gcgatagaac gatatacgag agcagacatg 180  
ttatagctgg tctacttgga agcagtttgg agttttacaag agaaacgagt tgggctctgt 240  
tgtgtcgttt ttcaagttta catcgtgaa tactccaagt attgaacaat aaattggttt 300  
atttacgaca aacaaaaaaa aaaaaaaat aaaacaaaa ataaaaaaat caacacgg 358

<210> 2500  
<211> 377



<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-F10  
 <400> 2500

gacccacgcg tcaggaagcg ctgtacgcaa aaaattgaac aacactacag atagcgatag 60  
 tgcgtctgat atgactggac atatatctga tagtattgtt tatcactcag gaggagatgt 120  
 ctctttctgat caaaattccg tgggttctcg agaagatagt ataccggaga gttaccactc 180  
 aactcgtcgt cgtgattata ttgattggaa tactttgaaa aatcactttc accttccgat 240  
 gaatgaagct tcagccaaac tgggtgtatg tgtgacggta ttgaagaaaa tatgtcgtcg 300  
 tttcgggaata tcgcatggc cacaccgcaa attgaaatct gtagctagac acattgaaag 360  
 acaagaacga gctttttt 377

<210> 2501  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-F7  
 <400> 2501

cccacgcgtc cgcgctcaat atactttctta ctacggcgaa tcactctcca gctattatta 60  
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 agtacagacc tatgaaactt atcaatgttc tcaagagaag aagaaggagt acagctatcc 180  
 ttgtcaaact tatgagcagg tttcaactac ttaccagtgt ggtcagtacg agtcccaaca 240  
 agtttactac caatgccaaa agtataagga gggtactcag caagaatgcc agtacgtcca 300  
 agagtcgtat tgtgtcgagt atgaagaatg tcagcaagtt acccaggaag tttctccttc 360  
 agaaattgtc tactacggtg aatcttcttc tagcagtagt tactactact a 411

<210> 2502  
 <211> 211  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-F8  
 <400> 2502

gacgcacgcg tacgacgtta tgcagttgtc caagctatct taagtgagga agacagagtc 60  
 gtggtcatac acttttggta ggactttgac ccgacatgta tgttgatgga cgaacacgtt 120  
 tacaacggca gcagaaatga taataatctt tgctgtcgtc tatttgggtct atatgcggga 180  
 agtccttgac tttcacgcga tgtaccacct g 211

<210> 2503  
 <211> 343  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-G1  
 <400> 2503

cccacgcgtc cgaataatgt tcgtgtctta ctccgtacct gcaagaaact taccggcttt 60  
 ggcacgtaac ttttccaatg tctgtctctc gaggagtggg ctgagagggg gatgtttacg 120  
 aaatgtgaaa gttttcaacc acaaacgacc tgcaagggtg ttatctacga aaatgagagg 180  
 aggcgaccat gaaaggagag aacttagtcg tcctatgcgt acgcttgatt ccgctttcga 240  
 cgaactttta gcttttgccg aggatccctg gtccatgttt cgctctccat ggagtctgtc 300  
 gcccagaagt atggcagtag acacgtggat gcctcgtgtt gac 343

<210> 2504  
 <211> 274  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-G3  
 <400> 2504

cattatctgc gttgtttggg gatttcttcg tgggtttgcg tctcaagatg tcatttttga 60  
 aacgtataca gtcgactctg ctttccaaca gaaactcagt aactaagacg agtgaggcca 120  
 attccacat acagcacgtt cgagtttacc gctgggactc tgaaaatcgg agaagaacct 180  
 aaatgtgggc acgtaatcca ttctcccaa gtaatgcagt cccatcgtgt tggacgccct 240  
 catcaggaca tacaatgaca tcgactctac cttt 274

<210> 2505  
 <211> 367

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-G4  
 <400> 2505  
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 acgcgtgggt tcgcacatcg ataatccacc caacagaaca acgctgggtg taataagagg 120  
 agcagcagct ggagcacaag gtgatgatcc atcgcagcag cagcagcaga ccttgccggg 180  
 gtcgttttgt accacgacag acgacctgtg gtttgtttgt aacaacaact tgggtgtcatg 240  
 aaaattccaa gtggagtaat ggcaagttat tgcctcgtca aagttttatt tccactgggc 300  
 gcgcctatta gaaacgttac aaccatagaa aggttggtgt ggttcctacg aaaacttgtt 360  
 gggccaa 367

<210> 2506  
 <211> 263  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-G5  
 <400> 2506  
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 atgaatatcc tggaaggaga atggtaatgt atggactaat aggagtaatg ataataatga 120  
 cgtaagagg gaaggagta ctgggagtag atgtacgaac gtcattggtta gggataagta 180  
 gtgtaataat aatgggaata atgggaatga tacatgtggt aagtacgtca tacacaaaca 240  
 tggagtccat ggaaagggtt acc 263

<210> 2507  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E1-G7  
 <400> 2507  
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 ctattcaagc ttctcctcta gaggaaactt tgggtgcctt tatgcggggg gggttatcaat 120

cgcaaagcca agcaccaaaa cctagctggt gcaagttgag ctgtcaatat acccaaattt 180  
 gtgaacaagt tatccagact cagcaagtta tccagactca gcaagttatc caaactcagc 240  
 aggtcatcca aactcagcaa gtttaccaaa cacaacaagt gcagcaaaca caacaagttt 300  
 cgtcagcata cggacgcaat gaggtatcca gagggggata tgcccaacag tctgtaaccc 360  
 cagctcctgc aacttcccgt ggtccacggt tcaagtcaag tgctgtaatt agtgctcatc 420

<210> 2508  
 <211> 418  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-H1

<400> 2508

cccacgcgtc cgacaaagtg tcgtttacaa aagaaagtat cacatattcc ctggtattgt 60  
 gtgaggatga gttgggttgc aactttaaaa tcttccaaaa tagaaggctc ctctgctatt 120  
 ccagaagggtg aacagcctga cctccataca aagtgggagc agtgtttaca agagaaaggg 180  
 tcaccagagt gccaacagtg tcaaggttca ggacaaatac catgtcctgc atgtgaagga 240  
 aagggttatt tcgtgatgga agttttcaat gttacctcta gtaaccagtg tcaagtttgc 300  
 cgtggacacc gtaaaactcc ttgcccact tgtaaagaat acatttatcg ggcagtaaaa 360  
 gaattatgat ataaagtaaa gctcaatctt tagaaatgga aatattgcct ccagtaac 418

<210> 2509  
 <211> 369  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-H10

<400> 2509

gaggcacgcg tcaggctctg atgtcgcgct cttcgggtaca aggtaaaaag gaagagggag 60  
 ttgccaatgg gacaagggtt ggtacagcct ttggggacgg acttttgcct caaagtcact 120  
 ctgtagactt gtcgtctcag ttgggacccg cagcggaaag tgaatttgc gtcgacaatg 180  
 caaacgatac tgagaaccat caagtgggag atagcaccat tgaactgaat tccaataaccg 240  
 aagtgggttca cgaccaagta gaagcgactc attcgacaag tggaggcgca gcacttcgag 300

atattgtgct ggggaatgtca gatggcctca cagttccttt tgcactagca gctggaatgg 360  
ctggtgcct 369

<210> 2510  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-051-Q1-E1-H12  
  
<400> 2510

acgcctgcag gtagcgggttc gggggtcgag ggacgagtca ggctgttctg tatggacctc 60  
gataaggaga ctatcgaacg catatccaag ctgtccccgg aagaaagaaa ccaagtggaa 120  
gaacgtgtga agaacgagat gttgagacaa gtttttcaag agctcgttca gactatatct 180  
gaaaagtgtt tectcaagtg catcacgaag cctggaagtt ctttgacatc aggtgaacaa 240  
acttgtcttg caaagtgtat ggatcgctat ttagatgcaa tgggaatcgt ttccaagacg 300  
ttaatagaga gaagttcacg taactctaac tagtttgtgt ttgatccgag gatttttgac 360  
ctgttagaaa ttgcagcgtc ctgaagctag gatagtggaa caagaactag t 411

<210> 2511  
<211> 290  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-051-Q1-E1-H4  
  
<400> 2511

acgcgtcagc ggaaacgtgg gcggacgcgt gggaagaggc aaatacggga aagcagtaaa 60  
agaagaaaga gaaaggaaaa aactgagtat caggaagaaa agagggagta gatgaggaaa 120  
gaaagatcaa ggaagtaaga gtaagagaag gagtaatgtg aatgaaagca ggaaagtatt 180  
tgaagaagag agtgtaaagc gcgtaccttt tgcataatgt cccagcgagt gaaagaggaa 240  
gcaaaaagaa agaaaaagaa gtagccaggt aagacccgaa gctagttgat 290

<210> 2512  
<211> 336  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-H7

<400> 2512

cccacacgtc cgctcacgcg tcagactcga ccaaagttgc aaacacattc gtttccagat 60  
actcttatat ggctcggaag tgtctgaaac ttcagctctc ctatatgtat acccactgga 120  
aaaacattta gcttccttga tggacatagg tatagagtac cagattgctt caagtgggtg 180  
cagaatggta acgacgatgg atcgatatga aggatattgt gcaaacgtac aaagaggctg 240  
gcttgcctcat gtgctatctg acacagaatc taccacgaca ttttcaagtg cttctgatgc 300  
tattcagatc ttccgtaagg aacataatgg agttat 336

<210> 2513

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E1-H8

<400> 2513

cccacgcgtc cgcccacgcg tccgcccacg cgctcgccca cgcgccggg cgctgggtggt 60  
tggtttgggc tattgtgtcc ctactacga gggttggttt tctgttgtgg tgaagacttt 120  
gtttagcaac ttgtgtgcaa aaaatggtca acttggttga tactgatgag ggacgaaacc 180  
tgttaaaggg ctaccaactc attttatatg ttgctatgtt ggctttctcc gccactattt 240  
tggggcttat ggggaatccc atgtttaatc tctatctaata tgccaatgaa tatagacacc 300  
cggtatctag cgaacctttt gtaccattg acaaagtga gaacgt 346

<210> 2514

<211> 301

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-A1

<400> 2514

agcccacgcg tccggttgta tagtaatatt ttaccgtatt tgaacaaaag attggacggt 60  
atctattgtc atcaaccacc gcttgacagc attagaaatg aaaaccgaaa agatatattg 120  
gccaatgtta ttatcgatga acaacaatat cgattgtctt tgaccaatac tgccaaattg 180

ttatgcattg ctgcttatat ggcttctcat atttccccaa aacgagactc gaagatattt 240  
 acaaagaaat cgacgcgtgt caaaaaacat cgcaggagaa ccaactcatc cactctgaca 300  
 g 301

<210> 2515  
 <211> 338  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-A10  
 <400> 2515

aacaactagc ccaaggatat aaagaaggaa ttcattggag tagaagaata tttcatacaa 60  
 ggaatggaat attggctctc ctgctttatc atagagataa agtggtggtt caaaaagtgc 120  
 ttggatattt attagtattg ttgatattgt tggagtgtat tcggttgcac agtagttggc 180  
 tgaatgagtt ggcaagtcgc ttattttacc ccattatgag aaagaacgag actagacggt 240  
 tcagtggaaat ggggtattat cttgcgggag tcctgtatgc ttctgttat tttgactcgg 300  
 ttgtttttga tttgggtgtt attcatttgg ctattggg 338

<210> 2516  
 <211> 333  
 <212> DNA  
 <213> Cyanidium caldarium -  
 <223> Clone ID: LIB190-051-Q1-E2-A11  
 <400> 2516

ggtcaggagt tcccggcacg actaagccga agcgtcggcc caagcgtctg gtctcattgt 60  
 agtcgtaatt gaggaatacg cagggcgaca gtaacgaggg gaatgggtat aagacagtat 120  
 gtgataccga gtcgtgtatc gcagctcgtc ggcgagtttc aagagcgcaa ggctggatgc 180  
 aactttacat agaacaccgg gaagtacgac cgatacatct gacatctatt tacctgtatg 240  
 tgctcttcat cggtcattat gcctttattg aagggtgtcc ttgggcggca agaaacaagg 300  
 ctagtcattc cagtagaacg ttttatgacc ttg 333

<210> 2517  
 <211> 378

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-A2  
 <400> 2517  
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 acggtatcta ttgtcatcaa ccaccgcttg cagacattag aaatgaaaac cgaaaagata 120  
 tattggccaa tggtattatc gatgaacaac aatatcgatt gtctttgacc aatactgcca 180  
 aattgttatg cattgctgct tatatggctt ctcataatttc cccaaaacga gactcgaaga 240  
 tatttacaaa gaaatcgacg cgtgtcaaaa aacatcgag gagaaaccaac tcatccactc 300  
 tgacagaagc cattcccttt cgttttagaaa gactgttggc tagttatcgc gtcattcaac 360  
 aacaactggg ccaatcat 378

<210> 2518  
 <211> 110  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-A4  
 <400> 2518  
 agccacacgt ctgacaatga gtaggacac gagtgtgagt gacgtctaga gcaggaagta 60  
 ttccttcata acttttcgta ctaactgtct tttggtatag tttcttgtgt 110

<210> 2519  
 <211> 245  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-A5  
 <400> 2519  
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 gcagtatcta ttgacaacac acaccgcttg cagacacata caaatgtata tatcggtgac 120  
 ataatggatc cggtaaatat cgaattttta ccatcgactg aatgtctctg tccactactg 180  
 ccaaaatgtt cggcaccgct cctcaaattg ccgcccacac caccaccg cggtattoga 240  
 caatg 245



<210> 2520  
<211> 350  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-A7

<400> 2520

agcccaagcg tccgtccacg cgtctgcgca tgcgtccgcc cacgcgtccg gttacaatat 60  
atcaaaagtt ttagattgga tgaatgctga tgaaatgtta tcgagaggct ttaatgaaca 120  
tatttatgag gttttccaat ataggcctgc aactgtcaa attggcactt ttctccgcca 180  
ttatgccgca agatgtacta aaaatgacgg agaagtttat gagagatcca gttgtgattt 240  
tggtgcagaa agatcaactt aactggaac gtatcaaaca atactatata ccactggata 300  
tcgacgagta caagtttgat actttacgtg acctctacta aactttgact 350

<210> 2521  
<211> 394  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-A9

<400> 2521

agcggacgcc gtgggcgcg acatagaatg gcaacagata aagtcagcta agaagatata 60  
ctcttatgta aaagaatcaa aaactaaaga atatttggag ctagacgatt cgttgcagca 120  
gccagtggat tcattctgta gcaccaagtg gctgtttatt gcaacccac tgttggaagt 180  
tgcttgact gatgggcagc gaattgaaat gattcctttg aagaaagata taaaggaatt 240  
gtttttctct actttaaga agaactttga gtcgaacgaa gcgtcatggg agtgcagtgt 300  
agttgaaacc gcagttgctg tttttatcca gtattatgaa cagtgtgtgg aacagtacta 360  
tctagcaagc atagattatg agctacctgg ttat 394

<210> 2522  
<211> 380  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-B11

<400> 2522

cggcacgcat cagcccacgc gtccgcccac gcgtccgttc cgattccggc aaatgaggag 60  
ccttttccaa actacgcata gtatggatag acgatacgag agagggatgg gtatcgagtt 120  
ggggatcgta ctacatggca aatgtgtgtg gagtaatgat ttatcacgat agacactgtc 180  
ttcactaacg ctagaacagg agaaacgaga gaacaacagc tacactaatt acttttccgg 240  
tctctacact ttattcctgg tgaacgaaaa aatgcaaggg acatgaccgc agacagctac 300  
ttgggttgta tccccccaga ataaacactt cctaaactcc catatgtcac caatacacgt 360  
gtaaagattt tactggcatt 380

<210> 2523

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-B12

<400> 2523

cgcgtcagcc caagcgtccg cccaagcgtc cggaagtaaa tagacgtttg aaatgcgtct 60  
agtatgaaaa gagacacgag tgtaacactg tccaatcctc caactcagcg aaacagcagg 120  
aactgtgaaa atgcagttaa ctagcagtat gacggacaga ccccaaaagt cttgactaga 180  
taggttcacg gaggagagag aatcatgaag tacaggaggt ggggtaagac atgaacgacc 240  
actgcatgag gataacgaat ctgactgagt aaggaaccta agcttaagct agtttggtctg 300  
gggaagttta cctaataaag agtaacttag gcaagcatag gcatgagaga agtataatag 360  
cacacgcatg catgaagata aagagtgaga tttcagaaa 399

<210> 2524

<211> 368

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-B4

<400> 2524

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gtgaacgctt tcaactttgc gctttcattc tcgtggcctt ctatgaaggc tgcatgggga 120

cctcaaggag gtttcggatt ctatgctggt ttcaactttc ttggcatcgt tatgcagttc 180  
 ttattcttac ctgaaaccaa gggctttaca ttggaacaaa tgagagtcgt gtttgaggag 240  
 ggtttattca ccategcagc ttatcactgt cgtgctggtt ggagaacact tcgtaagctt 300  
 ttgggacttc cagttccaga cactcctctt gtttctccct atgataaggc ctacgctatt 360  
 gaccgcgc 368

<210> 2525  
 <211> 312  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-B7  
 <400> 2525

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 ttgcaaaaat cggcatactt ttgcgtcgat aataatgcgc aaacgaaaga ctagcggcaa 120  
 gagctaaaac aggggcacca acagtcagtg atggacaaac ctcaagtgga tcaatccacg 180  
 ttggtaaaga tagacttgtc tcaaggcagc tttaaagtag tctaagactg tgacacagat 240  
 ttagaagtgt gattataagg ccaagtttca attggaactt atgcagtacg ggctctgttc 300  
 acctggctgt tg 312

<210> 2526  
 <211> 397  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-B9  
 <400> 2526

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 tggaaagaat aaacgccttt caaaaaaagg caagggagtg aagaagaggt tgacagatcc 120  
 gtttcttaga aaggaatggt acgacataaa ggccccagca atgttttctc aacgtcaggt 180  
 tggaaagact ttggttacca agacaaccgg aaccaaatt gtttcggaat cactgaaagg 240  
 tcgagtatac gatgtttgtc ttgccgacct gagtagcaac aaagacgaga gtttggcgta 300  
 cagaaaaatt cgtttgcgtt gtgaggaagt ggaaggaaga aactgtttga ccaactttta 360

tggaatggac ttgcccagag acaagctttg tgggctc 397

<210> 2527  
<211> 161  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-C10

<400> 2527

ctgtctgcag atatccaaat gtctatcaat actatgacgt tcaacattgg cagcatccgt 60

tgcaagtgcc acgtacgcaa tccatcagag tggtaggaac tatacctcta tagtgagggt 120

gaatgaacag cataatctct aagacataat cttgcggaat c 161

<210> 2528  
<211> 149  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-C11

<400> 2528

ccttttctac actttcatag ttaatttaac actcatttct atacaacctg tacgttttgt 60

atatatgagt ggtggttcct cattgttact catagctgag tcgggatatc ttataaaatc 120

caaaattttt cttctcgttt atcaaaaat 149

<210> 2529  
<211> 172  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-C6

<400> 2529

accacacgt caaggagagt agcttggtat gcagcgatgg ataagttcta acagccgctg 60

gttttggtgc agaccgtgcg ttaggataca tgcctgacta ctcaagtacg tgattccgga 120

tgacttccca actgtgctgt aattgcggt aggggtcgat cggtgaaaac gc 172

<210> 2530  
<211> 373

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-C9  
 <400> 2530  
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 gtgtgtattg tctactgtaa ttctgatcat gagagctcaa cctatgatac ctcgctactgg 120  
 tcttccttta aacgactgga ttcaagaggt agaggaatgg attccaagat aatttccatg 180  
 atctgtccaa ggaaattttg aactatttat tcgaggattc actgcattgg gctgtattgt 240  
 atccactgac tcattcatat aagtcgacta ttattactcc ttgattctag attctgcaat 300  
 ttttttgcaa gtaattgtaa ctatgtatga gagggcaaca gatcattagg agatcgatag 360  
 acttgatact att 373

<210> 2531  
 <211> 138  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-D1  
 <400> 2531  
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 agagagtaac acatgcaagt aggtaaagcg aacgggtgag taaagaggtg tgaaagactg 120  
 gaagaacatg agagcagc 138

<210> 2532  
 <211> 94  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-D10  
 <400> 2532  
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 acagtagagt cctacttgta tacttcgaaa gttt 94

<210> 2533  
 <211> 154

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-D11  
 <400> 2533  
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 ttttacgttt ttatcccttt caatgtctgc aatggaactc tgggacctac atgttctaaa 120  
 taaccctggt ggcgttcgac accccttttg tttt 154

<210> 2534  
 <211> 317  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-D12  
 <400> 2534  
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 cacgcgtccg cccacgcgtc cgcccacgcg tccgcccacg cgtccgcttg catttggtga 120  
 aaagacaaag aacttggtta ttctcagatt cggtttagta ggtatgctga tcggaactta 180  
 tgtttccatt atggaaatgc agaaaaatcc ggagtattga attgatattg cattgttctc 240  
 ctctttctct tgttgtacaa gtttacaaca aaaagcccg ctttggggtt tatacttttc 300  
 atgtaaattt tcctttc 317

<210> 2535  
 <211> 306  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-051-Q1-E2-D4  
 <400> 2535  
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 aagaagtgga cttagaagac tacgtttcca gaccggataa aatttctggt gcagatattg 120  
 ctgcaatctg ccaagaagcg ggaatgcaag ctgtacggaa gaatcggtat attatacttc 180  
 caaaagactt tgaaaaggca tataaaattg tcgtacgtaa agatgagcag gaatttgctt 240  
 tttacaaata agacatgatt tgtcgaataa agaatgaatg gatgcacaag ttgcactttg 300

caactt

306

<210> 2536  
<211> 62  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-E1

<400> 2536

cccacacgtc cgcccacgcg tcgggattgt tgaagaaata aacaaggaga atgggtttttg 60

gt 62

<210> 2537  
<211> 328  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-E11

<400> 2537

caatgcatac agtctgttag gtaactgaga accagagcaa atttgtcaaa tttgagaata 60

atgctaatac agtttttgaa gtagacacaa gcattatagg cctgggctta aacaatatag 120

ttcctcttgg aggacgggga cgatacagac agcaatccct tgcctaattgt ggaaggacga 180

attcttgcaa acgttatcga gtattgtaga tatcactcac tcttaaagac cattccgcac 240

tctgaggagg atattgagcg ctgggatacg gaattcccaa atgtagatca ttttatccct 300

ttctcatttg aatctggctg caaactat 328

<210> 2538  
<211> 287  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-E3

<400> 2538

cgcgctccact acaggcaatt tccatctttt tcgctcattc attcttacat ttcagtagat 60

gtacaatagt tttttcattg tcaaaaaata ttgcacaatc cacccatcga accacgaaaa 120

agaaagcctt tcgactcttt cttctacac ggtttgcac aagaagaatt agatacatag 180

aatcatcggc aacggattgg atgctggttt agaggcggtc aaccatagtc cagcaaaggt 240  
agcgtcgtag catggcctaa cggccatgta ggagagcaga ggtttga 287

<210> 2539  
<211> 306  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-051-Q1-E2-E5  
<400> 2539

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attgtcagat catcaagttt cagggtgcttc aagatggaaa acctcaggtg ataacttcgg 120  
atgaagtatt cggaggaaaag agagtagtat tgtgtgggtt acctgggtgcc tttactccaa 180  
cctgctctag gcagcacctt ccaggctttg gacagaatgt tgatgaaatc aaatcgaaag 240  
gagtagatac agtcgcttgt tgagctgtca gcgacgcgtt tgtgttacat cagtgggcag 300  
agtcac 306

<210> 2540  
<211> 419  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-051-Q1-E2-E8  
<400> 2540

gacccacacg tcagcccacg cgtccgcca cgcgtccggg aagcagaagt attcgtagca 60  
aagttgggta gctgggcgac agtcatcaaa ctgttctatc agacagtga atgttttct 120  
aatcaagtgg gaaactacca attacttggt cagcacgagt gaggataact tgaacaaatc 180  
ctcatatgga atgtgacaca acgtatctca actaagaaac aatgtgaaat atatccaaca 240  
acgtcacttt ttactattga gacaaacttg atggcggagc acaaaacaac cacaaaacta 300  
ttgcgtctgc attctacatc ctgcgagttg agatagaaat tccaagccta tctggacagt 360  
ggccagttga agtcatctgt tgaaagaaac cgtttctctg tcaaaccac agacgccgc 419

<210> 2541  
<211> 286



<212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-E9

<400> 2541

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 tatctggtgc agtgacaatg acgagtgtct gtgatccaga gtctcaagaa tattcatggt 120  
 cgggattgca acacatgata aagcggcggc agatgtaagg tgaggatatt atcactccga 180  
 aaaggcaaga tgagtgagtc actgaggtgt gatgagtccg aaacaaaagt tcgagagcag 240  
 tgttgcgaca aatacatcta cttccatcat acgctgtgtt cttttt 286

<210> 2542  
 <211> 62  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-F12

<400> 2542

acgcgtcagc ggaagcgtgg gcggacgcgt gggaaaaaaaa caaaaatcac gatgaccgtt 60  
 ac 62

<210> 2543  
 <211> 342  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-F6

<400> 2543

agcggcattc gacgacgcct tcgagctgga gcagcgttga gtaatttctg aaacacaaat 60  
 atgcgtgccca agtggaaaaa gaagagaaca cgacggttga agcgcaagag aagaaagatg 120  
 agacagcgtt ccaagtaacg gaagaatcct cggacgtctg agttgaatag agttcctaaa 180  
 acgtgggaaa actctatttg caactctggc gcagtgatta tatcctgcta cggaagggtg 240  
 gaagtgtttc cgaggattgt tcgcaagtta tgataaaagg ttcttgtggt ttttgttttc 300  
 aacttgtaaa tgccacttgt cagtcatttt attcgagtaa ag 342

<210> 2544  
 <211> 382  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-F7

<400> 2544

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agcccacgcg tccgcgctca atatacttct tactacggcg aatcctctc cagctattat 60
taccgagcag ctgctcctca gagatgggtat gaggaacaat gcacctcata ctgctggggtt 120
ccagtacaga cctatgaaac ttatcaatgt tctcaagaga agaagaagga gtacagctat 180
ccttgtcaaa cttatgagca gggttcaact acttaccagt gtggtcagta cgagtcccaa 240
caagtttact accaatgcc aaggtataag gaggttactc agcaagaatg ccagtacgtc 300
caagagtcgt atttgtgcga gtatgaagaa tgtcagcaag ttaccagga agtttctcct 360
tcaaaaattg tctactacgg tg 382
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<210> 2545  
 <211> 313  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-F8

<400> 2545

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agaggttatg cagttgacca agctatttca agtgaggaag atacagtcgt ggtcatacac 60
tttgggtcaag acgttcatcc gacatgtatg ttgatggact aaacacttta cagcgcagca 120
caaatgataa ctttttttgc tgtcctctat tcggtcgata tacgggaagt atctgacttt 180
aactctatgt acgaattgta tgattcttgt actggtatgt tcgtcattcg gaatcaacat 240
attatggtag acttgggtac cggtattaag aagttgatca actgggctat gactgacttt 300
caggatctta ttg 313
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<210> 2546  
 <211> 81  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-F9

<400> 2546

cgaaatatga atagccagat gcgatccatc acacgtaaaa tttatggctt gcagtttaat 60  
gtagtgact gacctcttcc c 81

<210> 2547  
<211> 332  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-G10

<400> 2547

acgcgtcagc ggaagcgtgg gcggacgctt ggggaaataa agaaactgca caaaaaaccc 60  
cgtactttta ccgtagaaat gaccaggcat tacaaagggt accagcaaaa cttcggcagc 120  
aaattgagcc atcggaggaa gtactcggcc aacaaagaaa aggcgtggca gaaatcttac 180  
aaaaacacgg tgtccagcct aatcaaagtt tgattgaaga tattgtccgt ttctttcatt 240  
aatccctccg tgtttgatgt ttagctgcgg ttcaactaga gttttgtttg ggaacacggt 300  
ggatccagta aagaacaaaa gaacttcttt gt 332

<210> 2548  
<211> 250  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-G12

<400> 2548

cgctacgcc ttcgagttgt tcctggatgg atagtccttt caattgttaa tacaaacatt 60  
tggtttgtgc ttaattgtcc ttgtatctca aattttattt tgttctcact agacaactgt 120  
tataaatggg ggggccgcgc cccaagggtc tcagcttacg tactcattgt atgcaacgtc 180  
atagcttcac aattgtgtgt caccttatcg tcacaagttc tgtatgagcc gatcagtttt 240  
aaaatctcat 250

<210> 2549  
<211> 401  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-G2

<400> 2549

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accggctttg gcacgtaact tttccaatgt ctgtctctcg aggagtgggc tgagaggggg 120  
atgtttacga aatgtgaaag ttttcaacca gaaacgacct gcaaggttgt tatctacgaa 180  
aatgagagga ggcgaccatg aaaggagaga acttagtcgt cctatgcgta cgcttgattc 240  
cgctttcgac gaacttttag cttttgcgca ggatccctgg tccatgtttc gctctccatg 300  
gagtctgtct cccagaagta tggcagtaga cacgtggatg cctcgtgttg acttggtgga 360  
gaaggaagat ggcttttatg catacgtgga actaccagga c 401

<210> 2550

<211> 323

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-G3

<400> 2550

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tcctttttga aacgtataca gtcgactctg ctttccaaca gagactcagt aacaaagaca 120  
gagtaaggcc aattacgaca tatagcacgt tcgagtttac cgctgggacc ctgaaaaggg 180  
agaagaacct gaattggtta cctactcgat tcctctcaaa gaatgcgggc ctatggtggt 240  
ggatgcctta ttcaaatat agaatgaact ggagattact tttgtatgta gaacgtcctg 300  
ccgagacgga atttgtggaa gtt 323

<210> 2551

<211> 101

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-G6

<400> 2551

accacacgt cagcggacgc gtgggatgtt actgttgcat tatacgagag agaacagtgt 60  
aagggtatag gaagtcagta tactggaacg agaatggtac t 101

<210> 2552  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-051-Q1-E2-H1  
  
 <400> 2552  
  
 cacgcgttca cccaagcgtc cgacaaagtg tcgtttacaa aagaaagtat cacatattcc 60  
 ctcgtattgt gtgaggatga gttgggttgc aactttaaaa tcttccaaaa tagaaggctc 120  
 ctctgctatt ccagaagggtg aacagcctga cctccatata aagtgggagc agtggtttaca 180  
 agagaaaggg tcaccagagt gccaacagtg tcaaggttca ggacaaatac catgtcctgc 240  
 atgtgaagga aagggttatt tcgtgatgga agttttcaat gttacctcta gtaaccagtg 300  
 tcaagtttgc cgtggacacc gtaaaactcc ttgccaact tgtaaagaat acatttatcg 360  
 ggcagtaaaa gatttatgat ataaagtata gctcaatctt taaaaatgga aat 413

<210> 2553  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-051-Q1-E2-H10  
  
 <400> 2553  
  
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 gggacaaggg ttggtacagc ctttggggac ggacttttgc ctcaaagtca ctctgtagac 120  
 ttgtcgtctc agttgggcac cgcagcggaa agtgaatttg tcgtcgacaa tgcacacgat 180  
 actgagaacc atcaagtggg cgatagcacc attgaactga attccaatac cgaagtgggt 240  
 cagaccaag tagaagcgac tcattcgaca ggtggaggcg cagcacttcg agataatgtg 300  
 ctgggaatgt cgatggcct cacagttcct tttgcactag cagctggaat ggctgggtgcc 360  
 ttttcaagtt ccaaggttat tgtattggca gtattggcag 400

<210> 2554  
 <211> 187  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-051-Q1-E2-H11

<400> 2554

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gtctcgtcag cttggcagca tattctgtca aatgggtctcg tgcattcaca ttctggccga 120  
gtgtgagtag aacagacgat gcttactgtg ataagatctt ggtttgtacc tggcccccta 180  
tggaag 187

<210> 2555

<211> 318

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-H12

<400> 2555

agcccacgcg tccgcgaaat ggtcactcac gcaaggcaaa cctaagacgg cccccggacg 60  
aaagaaaccc aaggggaaaa ccgtgtgaaa aacaaaatgt tacaacaggt ttttcaagag 120  
ctcgtacaca caataccgag aaaggtgttc ccacatgtgc atcaciaacc ccggaaattt 180  
ctttgacatc aggtgaacaa acgtgtcttg caaagtgtag ggatcgctat ttagatgcaa 240  
gggaactcgt tccaaagact ttaatagaga gaatttcacg taactcaaac aattgtgtgt 300  
gagatccgag gattttttg 318

<210> 2556

<211> 367

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-H2

<400> 2556

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ccgcctagtt ctctatacaa ttgtgttagc attttcagca acaataattg gacctgatgg 120  
aacgaaagca gataacatat ggaacgatgc cctatattat catggaaaag tggatgaactt 180  
ttgtgcatat tcagcgtcat cagtatttga aagtggcgac catggcgcat gtcaacatgt 240  
gatggcattg gcttctatca acttgattta agtgttctat cgttggttgg acacctttgt 300  
cgacgcattg tatccaattc ttacagagtt ctggtttgtg gagcttggtg tcatgatatt 360

ccttact

367

<210> 2557  
<211> 210  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-051-Q1-E2-H6  
  
<400> 2557

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ataatacaac gagtaatgtg aattggatca cgaaagtatt tgaagaacac agtgtaaagc 120  
gcgtaacttt tgcgatgatgt cccagccagt gaaagacgaa gcaaagagag agaaaaacaa 180  
gtagccaggt aagacccgaa gctaagtgat 210

<210> 2558  
<211> 433  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-051-Q1-E2-H8  
  
<400> 2558

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cgggcgctgg tgggtggttt gggctattgt gtccctcact acgaagtttg gttttctgtt 120  
gtggtgaaga ctttgtttag caacttgtgt gcaaaaaatg gtcaacttgt tgtatactga 180  
tgagggacga aacctgttaa agggctacca actcatttta tatgttgcta tgttggtttt 240  
ctccgccact attttggggc ttatggggaa tcccatgttt aatctctatc taattgccaa 300  
atgaatatag acatccggat cctancgaaa ccttttgtac ccattgacaa agttgaagaa 360  
cgtcactttt caacaagtcc tctctccttc tgtgcctggg gtgtcacagg agatcgtacg 420  
cgtggcatgc aat 433

<210> 2559  
<211> 84  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-051-Q1-E2-H9

<400> 2559

acgcgtcaga aaaaaaaaaa aaattcaaaa aagaaaaaga aaaaaggaaa cagaagcagg 60

acgctcaagg acgatggcac aaaa 84

<210> 2560

<211> 373

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-A10

<400> 2560

cccacgcgtc cgcccacgcg tccgatcgtc ttccacgcgg aagtaatatg atcgatcgaa 60

cagcattgcg caatgttgga atgcagtatg taacaaccgc ggatgatatt ggacatcgct 120

tggtcgtaga gatccaacta aaggaatcca gcaaatataa tagtcacatg aaggaaggag 180

aacgaccaaa tgcgggttaca gatatcattt ctacggaccc tgaaatggat aggaaagtat 240

ctcagtgggt gtcggaagga caaaaggcat tcttagtaga agatgagttg acgggtgaac 300

gtcgaggaat attcttaagc tcaaccaaatt tgaaagttca gaaacaagcc agtcaggaac 360

gaaatagcaa tca 373

<210> 2561

<211> 392

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-A12

<400> 2561

cggacgcgtg ggtgggggtt tcatgttgtc ttccaccaga gacgacatct cgacgagtag 60

tactgtgaaa ggtcaagtat gggcagagtc tctgatgaa gaaaccaagc agtgtttgca 120

atctttacgt tccaaagtac aatcgatgga cttgactcca aaagagttgg aatgggtgtga 180

cgacgcttgt ctcttgagat atttgcgcg tagaaataat catgtggaca aggctttgga 240

gttgataaga agaacgttac agtggcgaaa ggaatttgga gttgaagaaa tgatgaacaa 300

cgtacctgct ccagtgaagg aagaagggtc tagtcaaaag ctgtatgtgg gaagaaagga 360



caaatatggt cgtcctatca tttacatgaa ac

392

<210> 2562  
<211> 389  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-052-Q1-E1-A3  
  
<400> 2562

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gcctttattc gaaagtccaa caaagcaatt tgacttgccc tcaactacgaa agactttctt 120  
ttgtattggt ccggttggtt taagaagcgg ctagggggga gggttgggag ttggctgtgg 180  
gctgggcttt ggtcgtgggt ttgctttgag ggggctgtgg agtcaacgtg tcgggaggac 240  
cgggtggtatt cctacgcagt tcttgtatgg ttgcctttt ggacattacg tttctggggt 300  
tttgcagaac ttagctcgaa aatttcctgg aagttcaaca ggtattggct gtgggttttg 360  
tttgggctat ggcgttgga ttggtctac 389

<210> 2563  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-052-Q1-E1-A4  
  
<400> 2563

agaagcatcc aaagcagttc ttacaagact tgaatcttat ctgtgaaaat gcttttcatt 60  
ataatgagaa gaagtcggaa gtttatgagc ttgcacagga gttgaaaaaa cgagtcgaga 120  
acttgatgaa gccagttttg ggagagtgggt ctgctattga acaagcaatg actgaggata 180  
gtgaaaaggt gaattatggg ggcggggcgtt cagaaacacg gggaagtga gttatccccg 240  
caccaagtcg taggactaga aagaagacca acactagtaa ccgcgattcg aaatcgtcgg 300  
acaacgtgaa ttcagtaaac gttgaagttc acgagagcaa gtcaccaa at gctgaagatg 360  
ccaaggttgt caatatgtcg acaactgaaa atgat 395

<210> 2564  
<211> 199  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-A5

<400> 2564

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gaagagaaaa atttgtagtc ttgcgaggca gcattcctcc aacaaggggtg gaataagagg 120  
caacatgtgg gacagaccac aggagatact gcctgatgat aaaccaatat tttatggaaa 180  
aaaaagaaaa agagggggg 199

<210> 2565

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-A6

<400> 2565

attgaagctg ctgcttcttt atctgaacca tcagtagcca attcgcttcg tcatcgtttg 60  
tcagagctac aacatttgca tgacgatgga aagttacttg gtgatgacta ttagttgaag 120  
cgtgcgcgac ttttgagagg cttctctggt tctagtctta tgcaaaaagt tcatcattta 180  
ctttcttgta cgggaagcgt gcttttcctt gtgtcgtgcc ttgtccaaat tgggatataa 240  
gacagccatt ttatcttcag gtcctcattt cttggttgaa catgtgaaac gcactttagg 300  
aatggtaagt tatttttgtc tcgagcattt gactttattt aggattttgc atatggaaat 360  
acattcgaaa ccgatgcgat gggcaatttc actggggaaa taagtcag 408

<210> 2566

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-A7

<400> 2566

aagaaaagaa gagaaaagcc gtactgaaga ccgacacagg tactcgagga gaaaggagac 60  
ccaaattaag gtgagagaat ggacgataac gaactaggca aaaggagatg gtatcggcgg 120  
tagaacatat gaaagaggcg gcagggggagt gtttagcaaa aacacagcac tctgcagaaa 180

agagaaaatg tagagtgggg gagtgtgcgg cctgccaaagg agtagagaag aaatcgatga 240  
aagtgaaagc gagtaaaaga tgaggtatag agaatggcgg tcctaacagt aaggatccaa 300  
aggtagcgaa gtaaatagac gtttgaaagg cgtccagtat gaaaggagaa acgagtgtag 360  
cactgtctag tcgtccaact cagcgaaaca gcaataactg tgaaaatgca gtaactagc 420  
agt 423

<210> 2567  
<211> 415  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E1-A8  
<400> 2567

agcaattgag ctagtgaaac tgggtggaaga atgactactt tggactacaa tatagcttca 60  
actccgttta cagggccacc ttctacactt cacactggta cagtaaagct ggataatgag 120  
gaaatagagc gttatttata tcaactgata acagagtctt gcaagcccct tgcggaagag 180  
gatgtcaaaa gactgtgtga taaagcgcg ggcgttgta ttgaagagtc caacgttcaa 240  
cctgttagtt gtccagtaac tgtttgtggt gatattcatg gacagtttca cgacttggtta 300  
gaactcttta aaataggtgg caactgtccg gaaaccaact atcttttctt gggggactat 360  
gtagatagag gatattactc tgtggaagca gtaactgccc ttgtttgttt gaaaa 415

<210> 2568  
<211> 346  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E1-B10  
<400> 2568

cccacgcgtc cgaacttgac atgcaacaaa gtaaccttcg agtagtccaa tcttcttttg 60  
tggcaagctt tgtcctcatt ctaagtataa tctgtgccat tcatgcagta acagccgatg 120  
aaataacaag ttctgagaga ggatacaaaa cagttgcacc aactcagacg cagcaatgtc 180  
aaaagatttg tgtcaccgcc acacaaactc aagttcaaag ttgtatttat actcagacac 240  
aggctccgtt caggtcccaa tgtgtcaaag cattgccaac tacctgctat aaataacttaa 300

caaaatataa gcagggtgtgc tgtgagcagg aatacgagca acagaa

346

<210> 2569  
<211> 254  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-B11

<400> 2569

cccacgcgtc cgatctagtc aaaacaacaa cagatggcag caaaaaactc gattacttcg 60  
gaagttgtag attcctctcc tagtcctatc gttgcaatag caatcgtaa ctctcgaat 120  
cggcctcttt tcaactgaac atatgaacat cctgacttgg tgctgcctag cgctagaaca 180  
ggagaaacga gagaacaaca gctacactat ttacttttcc ggtctctaga ctttattcct 240  
ggtgaaggaa aaag 254

<210> 2570  
<211> 396  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-052-Q1-E1-B12

<400> 2570

cccacgcgtc cggaatattg ttgcaaggcc agggcagcac agatatcaag ttggaagccc 60  
gaaacagtta ttgtcgccgc gttctttgtt ttactacaa acattataat ggaattgggg 120  
caagaaaact ctagagttcc taccctccc ccacaactgc acctaatttt tgagcgaccc 180  
ggagctctca atactggtgg tagagcagcg atggctgcac tggcttctgt tttgtctgga 240  
aaaaaccttg tgatacaacc caactggatg gacaacgagg ggtgtaacaa atattgtatg 300  
gataaacggg attatatggg atgctgtagt ttggtacaa tacctgaaga gtggccgttg 360  
ttggagtgga acgcggaaaa tattccncca ctgaat 396

<210> 2571  
<211> 345  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-B2

<400> 2571

agcactctat tatattggct atcaaatecg agtatcgct ttggcttggg ccatcaacgg 60

agaaatttat gaattgcacg tgcgcaattg gggaatgtcg tggggtgcag ccattctttt 120

gggtgcggca ttctcagtga gcgagggatt taccagacaa gtacgagcat ttacgaaaac 180

tggagtattt ggattgtgag gaggagttag cctcattttc tggggtatcc ttatcatttt 240

aatgcctgag acaaattgaa gaacgctaga agatattcga aatatattcg atgaacgttt 300

aattggattg gcaaaatata actggagtca aaccaaaca tggat 345

<210> 2572

<211> 412

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-B3

<400> 2572

gcgaatggga gaattgagca tctttcgtcg tacttttagct gaaaatatat cgatgcgac 60

tgttgaatgc aacagcattt caaatatgga acttgaggtg aagaatgttc ctgcattttg 120

cagaacagct ggcgattcag ttgagaaggc tgacttgtcc aatgcttga aactattcta 180

tgagcattat ttgtcaggag acgcgattta tttgcatgaa ggggaaaact cttatgggcc 240

tggggttctt attcgtatat ctgatgtcat gcagagttct tcgattactt gtgagggaga 300

accatcctcg gaacaaatat caaaccttt acagaaaca aagacctact tgataggtat 360

ttcattgaaa tgttttgatg attcatgttg cactgtaagc catgatataa tt 412

<210> 2573

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-052-Q1-E1-B4

<400> 2573

agctatttga tgatcatttg acatttcttc aacacaatga agtgagctcc ttgttgaatg 60

tgttgtataa gctttctact agtgtggtaa ctattgcata catggaacgt ctccttgtgt 120

tgcaacgtat tgcatactgg ttgttggttg ccagttgtat gatgggtgtg gcttttggtat 180  
 ttatgttgat gtttcgacgt tctgtttggg agcgtgatga gttgtattac aaggccaaat 240  
 ctgtttaaag tcaatgttgc tatttgtatt tgaaaatctt tttttctttt tggaatatgc 300  
 tgggtactagg ttgttgttgt tgtatcgagt gacatgtatt tctgtctttgg acaacacaag 360  
 acatgtgtnt ttgagtagta taatanatat gcaagacggg tcgagacaca cacat 415

<210> 2574  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-B6

<400> 2574

caagcgtaga gcagaagaac tgggtgtaaa ggctcgagtag tagagtaagt gtaaaaggga 60  
 aaggaaagga gagaaagagg aaagggatcg aatgcagaga tctcgagaga aaggcaggaa 120  
 agaaaagaaa gtaagagaga gggatgaggg gagaaagcat aggaagtga acggattagg 180  
 aacccgtgta agcggaggcg ggaggagaaa gaatgaggag gaaaaaacgg agtcattcca 240  
 ccaggggagt aaaggcgcaa gaaagaaacc caaagcaatt gacgggaatc ggaaaaaggg 300  
 gtggatcacg taaattaatc cgatataaac cgagaacctt acctctccaa gaaagtgttg 360  
 cacggctgtc gaaagaacgt gctgtgaagt gagagaacgt acgagaaagc caagtga 417

<210> 2575  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-052-Q1-E1-B7

<400> 2575

cccacgcgtc cgtttgtggc attgttttga aaaagagagg cccatcctca cactactac 60  
 gagagaagaa accatgacta cgcagttaga aagaggagaa gaaggcggtg cacagcagga 120  
 agaagaaaat attccggagg acggcgagga cttggccacc tatgttcaaa acttgttgtc 180  
 tcagatgcag atgggtggtg gaggcgatgg cagacgcgag ggtaggcaga attgacgaga 240  
 tgggtagtcg tatacacgaa ctggagaaga gcatcgatga gttgatggaa cagactggag 300

taaaggaagg cgatggaaca gagtctggtg aggttactac gacaagtcgt ggggagtgaa 360  
tgcttcgggtt gtagtacgtt ggatatcntc cagagtagct cgtacta 407

<210> 2576  
<211> 417  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-B8

<400> 2576

cccacgcgtc cgcccacgcg tccgcccacg cgtccgggag gtgatttcca ccaagtcaca 60  
aagaatcgta aaagagaaaa tgacgatagg ttttgtacat ccacttggaa ctagtggtca 120  
atgtaacaaa cactacaaga ctgctacttg ttcttcccag ttttattcca agtcttcac 180  
gtttctaggg agaaaccagg cgggttgcaa gtcgtggtct cttgcctatg gaagcaaggt 240  
ggatcagaac aagtacactt acagtcaccc tagttccgta aaacaaggaa gaggaccaac 300  
tatggttgct tcgaaaacag agttggaaca acaagtaaga tccagactag tcaagttggt 360  
tgagcagaca ccttgcacgc ccatcatggt gagacttgct tggcacgacg ctggaac 417

<210> 2577  
<211> 366  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-C1

<400> 2577

cggctcgagc caccgcgtagg cggacgcgtg gggtgaggag gaagaactgt ggaacttgct 60  
gttgtctggc agcgccactg ttgttgcgaa gacactcgtc gctccaatag atacggcaaa 120  
gattttgtgg caggggtgagg cagttactcc tttgccctgc ggggcggcgc ggtagaactg 180  
gtttggaggc tcttaaaagt aagcggacta ttgagagggg gtgagaggag tgacgttgaa 240  
ggaggggttc caatagaaca gggattctgg gcagattgga gaggaaatgg agtgaatcta 300  
ctgagaacga taccagggtc tggcttcaag ttgttcatct acgaatactt taaagattaa 360  
ttcttc 366

<210> 2578  
 <211> 179  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-C12

<400> 2578

cggacgcgtg ggcgtattcg cgcaatgaga ggcaacgtga ctatgaagac agaccctttt 60  
 tgaagttggg gaaaccactt cgtgaccgtc ctatcagttt tatttcccca aatgatgaaa 120  
 atagcaggat tcctcattag ttggatagta caataaatag ttgttgagct ttatgttgg 179

<210> 2579  
 <211> 415  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-052-Q1-E1-C4

<400> 2579

agataatggc agttaggcaa tgtttgctta ttttcatatg tctttcagct ctgttagggt 60  
 caactttggc tgcttctggg gcaacgtcta tttagtcgtt gcttcagact aaaagagacg 120  
 agacttttac agtccaaagc agagagctgg ctaatctaac agacgtatac aacagcagtg 180  
 tattggactt taccttccgt gcgtgcaatg aactgcttg ggaagaatcc agagccaatg 240  
 tcaactgggc acttagtgca gcaaaacaaa acgtaacagg agcaatagcg tttctagaac 300  
 gcttgatagc agcaagcaca gtgaataaaa cgggtggagtt tagtaagctc tctagtggta 360  
 cgaaggaggt tgtttcgctg gcaggtttac cgcttaattt cactganaaat tctac 415

<210> 2580  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-052-Q1-E1-C6

<400> 2580

ggccttgtgc aagtcaacaa acatagaaaa gttaaagagat tgcaagaaga taatattttg 60  
 aatagagcac tatcacaacc aggagatgta tttctgtgct tttgcaacat ccagttgttg 120



gtgaatgcag aaagagcgag tatgaggaaa tattacttgt ccagaaagta tcgaattgtg 180  
 tcgtctatta gctggacata gacgggtttg gttcgatgaa gatttggatg actttcgttt 240  
 ggaagctatc ttgggagcac tattgtgtac ttgttattgt gagtggaagc gttttgaagg 300  
 agaattgggg gtacaagaat ggaatgaatt ggagaagata tcttccttag atacttgaa 360  
 gcttgtgctt ggtacaagac anagagtga taatatgtta cagcgagtac acaa 414

<210> 2581  
 <211> 415  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-C8

<400> 2581

acccctttgt ctttcggtag agagtgacaa ggggttgccg taccaagacg gcatgtctat 60  
 gcgctcgggc gacacaaaac gagaataacg agggcaaaag acggaatgcc attcgataga 120  
 gagtaaacad gcgtgacact gggaatgcaa caaccgctgg ttcgtctttt gcatagccag 180  
 ccggtcgtgt cgttgtctcg ggcgagttag ctccggtgta gcaaggctac caagccttct 240  
 tgcaatcgtt caggctttat gtcgattgat agttcaagtg tatttttgaa aaagagtaat 300  
 acaaggacga cttggcttgc atcttctcgt ttccttcttg gtttgctagt gctgtaagtg 360  
 ctcagggaaa cctacagtga aaccgaaaca atcgagcgag gttttgctat gacag 415

<210> 2582  
 <211> 339  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-C9

<400> 2582

cccacgcgtc cgtctttttc ttgttggtt ggtccgactt gcaaagagga tgatgaaacg 60  
 agacaagatc aagtcttggc atctttccca gtcttatcca gtggcgttac aaaatagaat 120  
 caccgaatgt cttgctttat tacaaaaatca acccaacaat attccttgct atatccaaca 180  
 atatggaata cccgaagtgt ctggtttgcg tgctttgata tggaactgtt gcattgaaaa 240  
 attctttgcg gtcgattcta ctacctcttt gcacgttgct tgttcacgt attgggaatc 300

gategcacaa tatcagcaac atccaaccga cgacccact

339

<210> 2583

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-D10

<400> 2583

cccacgcgtc cgagtctgct ctggttcgag ttttgaggag aaggaacgtt gcaagtcaaa 60  
gcaaccatt ctcgatatgc tcttgaaaaa ttcggcaggt ctgcatcaaa atgttttccg 120  
tgacttttct atgtggaaaa gaaaagaaag gacattatat ctcaaagatg atctaccagt 180  
gatggattac aaattcatct tgatgagttg ggggtcaacg atccatatga aatgaagtct 240  
caattatgga aatgacttgc caggttaatt tcttagcatt catttggctt ccttatactg 300  
gaaaactccg atggaaagtt tgtggataaa ttcagtaaaa agtataacag cagaatactc 360  
taatgggaaa catttgtcga aatttgcgtt ttgtgaaaaa ataactggaa gtttcaaagg 420  
aaccgctgca 430

<210> 2584

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-D11

<400> 2584

cacatttggc gggattccga gagagtgcac gttgttataa caaacgtttg ctgttgacaa 60  
gacttttacg tttttatcct tttcaatgac tgcagtggaag gtcttacaag taaatgttct 120  
aaataaccct gggttctttc gagaccggtt ttgttttgaa ataacttatg aagtgagaga 180  
agcgttacaa caagatattg agtggaaggt aatttatgtg agttgtgcca aagacgagag 240  
tttggaccaa gttttggatg aagtacttct tccagcagat acggtgggtc gttttcagtt 300  
tactttggag gtctcagcac ccaatccaga caaaatacct agtgatgact tattgggtat 360  
tacggcagta ttgatcactt gttcctacaa agatcaagaa ttca 404

<210> 2585  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-D12

<400> 2585

cccacgcgtc cgaagtttct tgggtctaggc agtctcgtat ctgagcgtcg ccatgacaat 60  
 gaaaatacac ttttggcgac agaattcacc tttcagtatt ctcagagcag gcaaaacacc 120  
 ctttttagta caatatccat gctgcagagt tcgaatgtaa taagaaaaat cgctcatttt 180  
 ggcgctgat cgaggcttgc catacgcatt tcctcatcgc tggaatggaa catttcgagt 240  
 tattttacta tggtgagaag aaggctcgtct cagtggcgac atttgtcttc aaaataattt 300  
 tttgcgagaa aggaaaataa cgtgagagta taagtacggc caagaagagg catttcaaatt 360  
 gaaaactaag atggaataat acgtttacta gtttcgagtt ctgtcaggga aaaatg 416

<210> 2586  
 <211> 523  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-D5

<400> 2586

gggggggggg gggggggggg gcgggggggg gggggggagg gggggggggg gtcgaagtct 60  
 ggcgccggga tgggtaggac ttccggcggc gaccacgcg tacgaagtgg gaataatagc 120  
 atggatgagt ataggatcat tgggagtata tggagtaata ataggaggat ggggaagcag 180  
 ttcgcagtac agcataatgg gaggttgagg aggtggagcg gagatggtat cgtatgaggg 240  
 agggggtgga gagatctcta gagaaaggca agaaagaaaa gaaaggaaga cacgcggggg 300  
 gggcggggag aaatcatatg ggagtgaac ggattacgaa cccgtgtagt cgaggcagta 360  
 gaagaaagaa tgagtaagaa aaaagggagt cattccacca ggggagtaaa ggcgcaagaa 420  
 agaaaccaa agcaattgac gggaatcgga aaaacgggtg gatcacgtaa attaatccga 480  
 ttacaccga gaaccttacc tctccaagaa ggtgttgac ggc 523

<210> 2587  
 <211> 416

<212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E1-D6  
  
 <400> 2587  
  
 gtactcctcg aaagctatat aagtagcgta tgcaggaaag aataaggtaa aggaagagaa 60  
 ggaagaagca gagagggact atgagcgaga aggtggatag tgcagaggga aaaagcgag 120  
 aagccaagat aaggtatcga ggtgaggaaa gaaggaaaag gagaagaaga gagggtaggc 180  
 ttagaagcag cacgcgagag aggagggcgt taaagcatgg gaggaaagaa atccgaaaaa 240  
 gaagagaaag aggtaaagaa gaggaccgaa tcagggtaag aggtagagga gcaagaagag 300  
 aagagagaat gctgggtgga gtagcgaaac aagagaaggg aagtaaaagg taagaaagag 360  
 gaaaggttta cgagagaagg aagtagaaag aagagagtgt aaggcggcgt cataat 416

<210> 2588  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-052-Q1-E1-D8  
  
 <400> 2588

aacaaacttg tggaggcaga tgccatcata tttggatttc ctacacgctt tggtatgatg 60  
 tgtgctcaaa tgaaggctat gtttgactct cttggacatt tgtggcaaag cggtcagctg 120  
 gttgggaaac ttgcgggtat ctttgtatcc accggtactc aaggaggtgg acaagaaacg 180  
 actgctttaa ctgccagtag gcagttggca cacttgggaa ggattttcgt tccgacaggt 240  
 tggaatatat tgggaataac ttttcatggt ttgtgaatat tggataggat attcttatgg 300  
 cagtgatatg tttggtttaa aggagcctca gggaggttct gcttatggtg caggtaacctt 360  
 tgcangtgca gatggaagtc gacaaccttc cgaatacgag ttggctagag caaaacatca 420  
 a 421

<210> 2589  
 <211> 362  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-D9

<400> 2589

gggaaaccaa agacatttgg gttgcaaattg ttggaggaaa accacaaagc gttttactca 60  
ttgaaaagtt tgtcagttta atggaaaagg aaaaggaaga acgggagaaa tgggcatgg 120  
aagcatggaa aacgcaatta attgtcgatg ctatttatca atccgcaaaa accaagcaag 180  
tagttgtcat gaaatattag ttttctttgt agtatttcta aagatttcca tgtttgtatc 240  
gtatatgatt actgagatgt aaacgaggag gaagtcagtg tttgttgaag aaagctttgg 300  
ctatacaact gggaacgatg acttgtgcaa taaatgtcac acaaattgtga cgtttttcta 360  
cg 362

<210> 2590

<211> 380

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-E11

<400> 2590

cccacgcgtc cggtcgtagt ggtaaatgaa caccgagagc aaaactgtca aacttgtgag 60  
tagtgataat gaagtttttg aagtagacac aagcattgta tccctttctg aaacaataaa 120  
aaacgtcttg gaagacacgg aggatacaga gagcattccc ttgcctaattg tggaaggacg 180  
aattcttgca aaggttatcg agtattgtag atatcactca ctcttaaaga ccattccgca 240  
gtctgaggag gatattgagc gctgggatag ggaattccta aatgtagatc aaccaaccct 300  
ttttcatttg attctggctg caaactatct ggatatcaag agcttgttgg atttaacttg 360  
taaacgagta gcagatatga 380

<210> 2591

<211> 377

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-E12

<400> 2591

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cattacttgg aaaggatggc agatgttggg tttgatatta tttctgtgga ttggacggtg 120  
gatattggca aggcgagaga acgcatgggt tcttcttctg gtattcaagg caatttagat 180  
cccgtatatt tgtagggac acctcaactc attgaagagc gcacgcgtga gattattcat 240  
aaagctggac ctctgtgtca tattatgaat ttgggacacg gcgtattacc caacacacca 300  
gaagaaaatg tagccaaatt ctttcaaacg gtgcaacaat ttcgttggca agaataaatt 360  
tactctatta gctgccg 377

<210> 2592  
<211> 422  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E1-E2  
<400> 2592

cccacgcgtc cgttgttttt cgtaaaagtt ttcattcagc atggctccta aagggtgctaa 60  
aagtgtaccc gttgcaggta aaaagccggt ggcaaaagtt gaaaggaaga cgtcgagaag 120  
aagagatcgg agacgtattc caggagaga tacaaggttc tgaagcaagt tcctcctgac 180  
accggaatat ccgcaaaggg tatgagcggc atgaattcct tggggagtga tatttttgag 240  
agaattgcgt cagaagctag caaattagct gcttattcga aaagcaagac gcttacttcg 300  
agagaggtag aaactgccgt tcgtcttttg ttaccaggag aacttgcaaa acacgctgta 360  
tcggaaagta caaaagcagt aacaaaatac acttcttctt aacggtacaa caagtgtcga 420  
aa 422

<210> 2593  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E1-E3  
<400> 2593

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tggcagggaa atgtggaaat ataacactag ttggtagtct tccatccatt cgatcggctt 120  
ctagtgttct tccttcatgt gactagtctt tcgcaagtaa cattcaaagg agatccttct 180

cggtgttcc ttcggaggaa agggcaaata aacaaggggg agaagctaatt gttacacaag 240  
 atacttccaa aagtacttct ccaactgttt tgcaggatac ttatggcttt gaattaagaa 300  
 caggccgagc ggacaggatg ctttcttcgt ttgagcaagc cacgggaagt gaacgagcag 360  
 aattggaaga tcccgatatt tctcgtaatt ctgaaaagtt tgtcaacagc a 411

<210> 2594  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-E5  
 <400> 2594

cacacattca tgtttgcctt tcagtacagc ttatgttcca gttctattta tctaaggaga 60  
 gttgcatgga agagtatcaa ttatcatggt taccctcgag tgtgctgcc taaggagtag 120  
 ggtaatcttt ccaaggggggt aggtcaagtg ctgccgatag tagcagtgc aaggaaggtg 180  
 tcaagaatat cggggggggcg gagcaacgaa aaaggtggcg aaatatatca ctcaagttgaa 240  
 gaaaatgtaa agaagggagc agaaaaagta tcagaaaagg ttgatgaatt caaagacgct 300  
 gtgcaggata gaatggaaaa tgcagatact tccaaagcaa aagacgtagc aagagatgtt 360  
 gtagataagg tcaaagatgc tggacaatcc gtaaaggacg gtgtctctga tgc 413

<210> 2595  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-E6  
 <400> 2595

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 taggtaaagc gaacgggtga gtaaagaggt gggaaagagt ggaagagcat gaaagcacag 120  
 gagaatgtaa gaaatggtga gagtggaaac cataaaggaa gtaaaagcgg gaatctgaga 180  
 ggaggaaaagc cacattggga cggaggaaaa ggtccaaacg ggagaagtca gcagtgggga 240  
 aaattgggca atgtacaggg aagtatgacc cagtaatgag gagtggagta aacagaaaag 300  
 gaagtaaaag gagggaatga acggaagtta tggcaaaaac acgtgccagc agcagcggtg 360

aaacgtgtgt agcaggcgta gagcagaaga actgggtgta aaggtcgagt

410

<210> 2596  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-E8

<400> 2596

ggcgctggtg gttggtttgg gctattgtgt ccctcactac gaggtttggt tttctgttgt 60  
ggtgaagact ttgttttagca acttgtgtgt gaaaaatggt caacttgttg gagacggatg 120  
agggacgaaa cctgttggcg ggcgggcaac tcattttata tgttgctatg ttggctttct 180  
ccgccactat tgtggggggg agggggaatc ccatgggggg gctctatcta attgccaatg 240  
aatatagaca cccggatcct agcgaacctt ttgtacccat tgacaaagtg aagaacgtca 300  
ctttctacaa gtctctttcc ttctgtgcct ggggtgtcac aggagatcgt acgcgtggca 360  
tgcattccac ttgccgatgg gtca 384

<210> 2597  
<211> 379  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-E9

<400> 2597

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ttcgagcagg agtttatgtg gtgcggagac aaggacgagt gtatgttata cagagtctga 120  
agaagattca tcgtcaaaag tgcaagagag gagaaagcgg cggcggagga aaggggagga 180  
tattagcagt ccgaagaggc aagagagtga gtcacggcgg agtgaggagt ccgaaagaga 240  
ggaacgagag caatgtaacg aagaagaaaa ttatttctat cacaaacttg atttctttta 300  
tttgaagtct aatcggcaga ataatgtgac aacaaatcct gcagagtttg tttcccttgt 360  
caaagatatg acagagcct 379

<210> 2598  
<211> 388  
<212> DNA



<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-F10  
 <400> 2598

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 aatccgagag acgatagatt tgctttttcc tgcggatcaa gtgcaagtca tagcagagcc 120  
 tgggcgttat tttgtttcat ccgcctttac tttggctacg aggattattg cccgtcgggtt 180  
 tcgaacccaa tcacaggaag gagacggcag ttgtctgaag gcaggctttt gtttgcaaga 240  
 agatatttct cgttcgagtc ttgttgctga ttactatggt gatgatgggtg tttatggttc 300  
 gtttcgagat gtgatatctt tgggtgtggt attctatccc aaaacgttta gcagctctga 360  
 cgacactgct attgactatg cacgtttt 388

<210> 2599  
 <211> 401  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-F11  
 <400> 2599

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 taagtaccaa gttagcatac aatgttgctg cggagttgaa tcaaacaagt cgttgctaca 120  
 ctcttggaag caagctccct caaggcattg atgttccgga aagatgtgaa ttggtcattc 180  
 tttgtgaaga agatgttgaa aactttattg gcaaaagtat attgtcaggt ttaagagagg 240  
 cctttacgtt gacagataat ccaagtttga aggttattga gaatcccgtc ctgaaagaca 300  
 tgggtgttgc tttggaccaa atgagcttga aaagggttgc gtgagttgga atttattggt 360  
 agttgttatt ggatagtttt atgatattta tataaagaat c 401

<210> 2600  
 <211> 357  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-F12  
 <400> 2600

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 ggaaagggat gaaatgcaga gatctctaga gaaaggcaag aaagaaaaga aaggaagaca 120  
 cagtaaatga ggcgagaaag cataggaagt gaaacggatt aggaacccgt gtagtctatg 180  
 cagtaaaaga aagaatgagt aagaaaaaag ggagtcattc caccagggga gtaaaggcgc 240  
 aagaaagaaa cccaaagcaa ttgacgggaa tcggaaaaag ggggtggatca cgtaaattaa 300  
 tccgatgtaa accgagaacc ttacctctcc aagaagggtg tgcacggctg tcgaaag 357

<210> 2601  
 <211> 350  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-F2

<400> 2601

agcccacgcg tccgcatttt tctttgggag aaaacgacgt cgtcgactca ggggaccgaa 60  
 gaagacttcg aaagtagcac ctctcctga agctctggtg aaaaaagaaa aaaagggaga 120  
 ggggggaggg gggaaaaacc ctcttttctg ggggggaggc aagaactttg gtattggtgg 180  
 agatgtacaa ccaaagagag atgtgactgc gggggcgggg gttatcgag gggggtgcgt 240  
 cttcaaagac aacgaaaggt tctcatgtcg agactcaagg tgccacctgc gatccaccag 300  
 ttacgcata ccttgataa aaacgtttcc aaacagctat tccgcttgtt 350

<210> 2602  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-F4

<400> 2602

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 aaaatatatg gcttgctgtt taatgtaccg tggtagcgtc gttcccaagg acgtgaacgc 120  
 agctgtggct tccatcaaga cgaagcgtgc gattcaattt gtagactggt gtccaacagg 180  
 attcaagtgc ggtatcaact agcgggagcg gtctgtgatt cctggagcgc ggaattggct 240  
 aaagttcaac gtgcagtcgg catgatttcc aacagcactg ccactctctga agtctttgcc 300

agaattgata acaagtttga tcttatgtat gcaaagagag catttggtca ttggtacgtt 360  
 ggagaaggta tggaagaacg tgaactttcc aaagcacgtc aggatcttgc cgctctccat 420  
 aaggat 426

<210> 2603  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-F5  
 <400> 2603

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 tactagtttc tattcttttc aagattcgaa acaacttcca tcggaagtgt gaagtcgttt 120  
 tgaagcagtt gattgtgtgg tgtagccaac tggagtggca aggaaatgga gagcagcatg 180  
 atcagctcgg gggaggaggg gcgtcagttg tgggagtgtc tactagaatc tcaaactcac 240  
 tatgcacaaa tgatggaaga attgattcct ttattgattg ctctcacgca acgtactacg 300  
 gaatacgtga gtcactatgt tgtgttgata agaaactata ttcacttggg aggtcgccat 360  
 tttgtggtaa cttatggaaa ttggttgtgt tcctttttat attcattgct tggt 414

<210> 2604  
 <211> 317  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-F8  
 <400> 2604

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 tatagtgatt ccctttgtca acaaagatac ttgtttgctt tggctctgtga atgtgttcct 120  
 gatcgtagt ctttatgcgg agcggaggtt ttggtgaaag acgcgccagt cgccatgaga 180  
 attcgtggca tttggagggg ggccgagcgt gcaacggaag gaggagggtc aagttttgaa 240  
 caagtaaaag gtttttggat tggggtagtt ggaagtaggc aaaggagaaa ataaaagaaa 300  
 gcaacgtctt tttagct 317

<210> 2605

<211> 344  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E1-G10  
  
 <400> 2605  
  
 ggtcaaaaag cgtctttttt tttctcttgg agcaaagtgc gtttcgattg tgaatccaaa 60  
 catttgggtgg cctcttattt gtccttgttt ctccaaagat ttttttttcg ccctagaaaa 120  
 ctttaacgga tcatgttgga ggctccagtt gaagaaaaga tactttgtgg tagacagcga 180  
 tattgcctca gattgtagaa agtattgcac tggtttatac agagataacc acgtcttagt 240  
 gacactgaat ttataccgtc cgctgtctga gagtcgtttg ttcctagtat tgcatttttc 300  
 ttttgttttc ttgaaataaa aatttggcgc caatttgtac tggc 344

<210> 2606  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E1-G2  
  
 <400> 2606  
  
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 acacatgcaa gtaggtaaag cgaacgggtg agtaaagagg tgtgaaagag tggaagagca 120  
 tgagggcgca gaagaatgta agaagggggg agagtaaaaa ccataaagga agtaaaagcg 180  
 ggaatctgag aggaggaaag ccagaggggg ggggataaaa ggtccagggg aggagaagtc 240  
 agcagtgggg aaaattgggc aatgtacagg gaagtatgac ccagtaatga ggagtggagt 300  
 aaacagaaaa ggaagtaaaa ggagggaatg aagggaagtt atggcaaaaa cacgtgccag 360  
 cagcagcggg taaacgtgtg tagcaagcgt aaagcagaag aactgggtgt aaaggtcgag 420  
 t 421

<210> 2607  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E1-G3

<400> 2607

cggtcgtga gatgctactc cacaaggtaa agaacccttc gagagtggac tttgtccatg 60

tcatgttat ggaaaaatct gtactttcta gcgtattaaa ggatgctgag gtgggtttct 120

tccgtgcttc agcttctgca ggggtggagag tccctggtag ttctaagaac accccgaaac 180

aggtggacta cttggggggg atgcgggtcg cacaagcggc ggggcaagct aaggttaaac 240

gtctcatctt ggtaagctca gcaatggtga ctaaccgaag ttcattccct tatttgttct 300

tgaactctgc atttggacga attatgcatt ggaaaatgca aggagaaatt ggagtcacat 360

aagttcatga gaaaaatcca gaaatggctt atactattgt tcgccagga cacctg 416

<210> 2608

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-G7

<400> 2608

cccacgcgtc cgcccacgcg tccggtcgtg tacgaggggt ggtcatttgt tgagctgaag 60

agtcaatgaa caagcttcag ttgctatgcg taaccaaaaca acctgtttca agagcatggc 120

aaagagaaca gaaggggtta gactccgaga agaaatcagt tgcagaagga actttgggaa 180

gcaggtggaa ggggagggag actgcacaag agagcgcgta ctttaatcgt gaagatgagc 240

aggcagtaca aaggttagca gcgaaacttc ggcagcaaat tgagccatcg gaggaagtac 300

tcgccaaca gagaaaaggc gtggcagaaa tcttacaaaa gcacggtgct cagcctaate 360

aaagtttgat tgaagatatt gtccgtatct ttcattaatt cctccgtggt tga 413

<210> 2609

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-G9

<400> 2609

cccacgcgtc cgcccacgcg tccggaaaag agaagagagc tagaaaggag gtaaaagaag 60

agtaaaagga ctagaagagg tacggaattc acgaggaagg agcgtgaagg aaggaggaat 120

cccaagtaat cgaggaagaa aaagcttcgg tgaaagcgtg aacggatttt gtacacactg 180  
 cccgtcaagt tctggaagtg tgctaggagt ggagtaaaca gaaaaggaag taaaaggagg 240  
 gaatgaaggg aagttatggc aaaaacacgt gccagcagca gcggtaaaac gtgtgtagca 300  
 agcgtagagc agaagaactg ggtgtaaagg tcgagtagta gagtaagtgt aaaagggaaa 360  
 ggaaaggaga gaaag 375

<210> 2610  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-H1  
 <400> 2610

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 cttagtgttt caagatattt atcctgtgaa catgcgcaag gaagaagatg aaggaacttt 120  
 gtttgggaga tttccagatg agagttatga tggctatact agtaacgttc caggaaatcc 180  
 gtggattcta tgtacttttag gaatggggca atattattat gaggttggag cagagtgggt 240  
 gaaacatgag gagattgtca taggaaagtg gagcaaagac ttttccagac atttgaggggt 300  
 tatgcctcct ctttctcctc ctcaatcttc tatatcaacg accattactg gaaaagcgat 360  
 ttgtagttat gtttctgcgc tattagaaga aggagatcgc gtattgaatg ctat 414

<210> 2611  
 <211> 365  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-H10  
 <400> 2611

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 agatgaggat agctcgatg atgagtacta tagttatgat gaagatattt ctgattatga 120  
 ttcggaagaa gaagttgatg acttgttttc agaagaagac acggattcag aagaagaagg 180  
 ttccagtgcac tcggatgcgc tgtaaaagag tgtacagtgc agcaatggaa caaaagttgt 240  
 ttcgcaacag tgtatagaca gaaatagata gatgtagaaa ggaaaacacg caactattat 300

tatctattct tttcaccaag gaacaaccgt ttgctcgtcc ttgtgggcgt atatatgtct 360  
ataga 365

<210> 2612  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-052-Q1-E1-H11  
  
<400> 2612

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ttccgtcata gaaaagaata tcgcttggtt tccttggttg tcgccaggaa aggccgtctt 120  
tcgacccaat tttcaggcga aaggcactat caacgcagtt ggagcaggag acacatttac 180  
agcaggtata ttagctatgc ttctaagaca agcacattct tcactcttcc tatctttgga 240  
attgttggca gatgttgat tggtgctgc tatgcaaaga attgactctg gagtcgaacc 300  
aaaaaactg caaaaacttg ttatgcaact cgatgagatg ccccgctgctt ctgttcagtc 360  
cctttgatca tttgtaataa atcttccaac gcaac 395

<210> 2613  
<211> 331  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-052-Q1-E1-H12  
  
<400> 2613

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agagcctctt gtgaagcgtt ctgatgataa tccagaaact ttaaagaaga gattagaagc 120  
atttcataaa agtacggatc ctgtgattcg ttattatgag aagaaaggta ttttatgtcg 180  
aatagatgct tctaaagata tcgatcaagt atctcaacaa gtggagcaag ctattgaaga 240  
acgacaaaag actgccaatg cagcctgaaa gttgttttgc aagtaaaaag tggtgttggt 300  
tttttgtgcg tttaaaaaa aannnnnnan a 331

<210> 2614  
<211> 364

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-H2  
 <400> 2614  
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 taaagcgaac ggggtagtaa agaggtgtga aagagtggag gaacatgaaa gcacagaaga 120  
 atgtgggaga tgggttagagt aaaaaccagg gggggaagta aaagcgggaa tctgagagga 180  
 ggaaagccac attggcactg agaaaggggc agcgggatag aagtcagggg gggggaaaat 240  
 tgggcaatgt acaggaagt atgaccaggt aatgacgagt ggagtatcca gcaaatgaag 300  
 tataaggagg gaatgactgg aagttatggc acaaacacgt gccagcagca gcggtaaaac 360  
 gtgt 364

<210> 2615  
 <211> 412  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E1-H3  
 <400> 2615  
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 atattgttgc cttggttatt gacaatggct ctggtatggt gaaagcagga gttgcagggg 120  
 acgatgctcc tcgttccatg gtggcgctga tcgtaggtcg accaagacac caagctatta 180  
 tggttggtat gggagggaga ggggagttat gtgggtgatg aggctcagtc tcgaaggggt 240  
 atactctctt taaaataccc aatagaacac ggtattgtca ctaattggga tgatatggaa 300  
 aagatatggc accatacttt ctacaatgaa cttcgaattg cacctgaaga gcatccagtc 360  
 ttgttgaccg aagctcctct caatccagag gcaaacaggg agaaaatgac tc 412

<210> 2616  
 <211> 433  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-052-Q1-E1-H4



<400> 2616

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tcgtaggttg gtacgacagg ctgcggagta catcgttcgg aaagaatata aagtttccga 120

tatagttcga aaacgtctgt atgaagaaga cacgaggttt gcctttcttt ctccaaagcg 180

gtcgcaccac gaagaaatag taggagaact gggagaaaca gtacagagac tgggagccaa 240

aagaaagcat aaaacacaac acacctcagc gaaaagatat agaaaaacta cagaaacgga 300

agattatgga gacagactgt ccacagtttc tatgggtacc ttggcctcat atatgaaccg 360

ccacaaggaa agagtgcctt atcaggtact tgatatggan gaaatactcc acgcaacacc 420

tttatctccc gtc 433

<210> 2617

<211> 370

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-H7

<400> 2617

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attattacaa gtaaacaatga gttgttcaaa gtaaaaaaaa agggcgagag aggaagaaaa 120

aaaaaagaat aatggcgggg aggggttcaga cacaaaataa cttcaaaaga aaaataaaaa 180

gttctccaag cgggggagga gggagtcaag ccaaggaggg gacaactagg gccgtcctgc 240

cagggaaggc actcgaatth accctgcata gcccttttaa aacccatcta cctttcgcca 300

atgtgcataa tacggaatca gtttgaaaaa ctcaccgttg ggaaaagatt caccttccca 360

aaacttatcc 370

<210> 2618

<211> 341

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E1-H8

<400> 2618

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ctttccacag agtgctttat aagaaaagaa aggaggacac agtaaatgag gcgagaaagc 120  
ataggaagtg aaacggatta ggaacccgtg tagtctatgc agtaaaagaa agaatgagta 180  
agaaaaaagg gagtcattcc agcaggggag taaaggcgca agagggagac ccaaagcaat 240  
tgacgggaat cggaaaaagg taagaaagag gaccgaatca gggtaagagg tagaggagca 300  
agaagagaag agagaatgct ggggtggagta gcgaaacaag a 341

<210> 2619  
<211> 246  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E1-H9  
<400> 2619

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cgtggagtgt agttctggta cgggtgttga tcaagtttct ttggaagaca gagaatatta 120  
tgattatgat gaaaaggaaa aggaacaagt cgctattacc ggtttagaat ggcaatggaa 180  
gagagtataa atttccaaac aacaacaata ataaaaaata tagtcataga aattgttttc 240  
cacaat 246

<210> 2620  
<211> 392  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E2-A10  
<400> 2620

agcccacgcg tccgcccacg cgtccgatcg tcttccacgc ggaagtaata tgatcgatcg 60  
aacagcattg cgcaatgttg gaatgcagta tgtaacaacc gcggatgata ttggacatcg 120  
cttggtcgta gagatccaac taaaggaatc cagcaaatat aatagtcaca tgaaggaagg 180  
agaacgacca aatgcggtta cagatatcat ttctacggac cctgaaatgg ataggaaagt 240  
atctcagtgg gtgtcggag gacaaaaggc attcttagta gaagatgagt tgacgggtga 300  
acgtcgagga atattcttaa gctcaaccaa attgaaagtt cagaaacaag ccagtcagga 360  
ccgaaatagc aatcatggag taaatactag ca 392

<210> 2621  
 <211> 334  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-A12  
  
 <400> 2621  
  
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 tactgttcat cagtcaagta agggcaaagt ctccgtgataa caacagcagc cactgtttgc 120  
 aacttttact ttcgacagta cactcgattg acttgactcg atgcaaattg gcatgggtgtg 180  
 tetgacgctt gacgctcgag atatgtgtc tcgatacaga atcatatgga caaggccatt 240  
 gcgctttgat agtgaagaac gttacaatgg cgaatggaat ttggagttga agaaatgatg 300  
 aacactctac ctgctccagt gatagatgaa cgtg 334

<210> 2622  
 <211> 252  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-A2  
  
 <400> 2622  
  
 ctactgaca tcgtatccgc ggttcaacac tagagacgaa cagcaccgac tgtttaacac 60  
 aaacacagca ttctgccgaa ttgtagaaaa tgctcgagta tcgagtgtgc ggcttgccaa 120  
 atactaccga ggaacgaggt gtagcatgca ggcaaagaag tgacgcactc gatcacagac 180  
 taacacatgc aactaggtac agcgaacggc tgagtaccga ggtgtgaaag actggaagaa 240  
 catgcaacca ca 252

<210> 2623  
 <211> 403  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-A3  
  
 <400> 2623  
  
 ggtcaggaat tccagtcacg cgtcagatgc aagcggccct tgatgggata ttatgctttg 60

gcaaatacca aacagccttt attcgaaagt ccaacaaagc aatttgactt gtcctcacta 120  
caaaagactt tcttttgtat tggteccggtt tgtttaagaa gcggtatgg attaggtttg 180  
ggagttggct gtgggctggg ctttggtcgt gggtttgctt tgatggacct gtctagtcaa 240  
ggtgtcggta gcaccggtgg tattcctacg cagttcttgt atggtttgcc ttttggacat 300  
tacgtttctg ggtttttgca gaacttagct caaaatttc ctggaagttc aacaggtatt 360  
ggctgtgggt ttggtttggg ctatggcggt ggaattggtc tac 403

<210> 2624  
<211> 343  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-A4

<400> 2624

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attcgactgt ccaacagtgc actttgacat gtcctacca tcacacacgt tcagttgtgc 120  
tggteccggtt tgtttaagaa cctgctatgg attacgtttg ggagtttcct gtaggctgcg 180  
ttttggacat gagtttgctt tcttgtgtcc atgtcaagtc aaagtgtctg aatcaccagt 240  
ggtagtecta ccctgttcct gttccgattg ccgtttgtgc ataaagtcac tgcatttttg 300  
caacatttac ctccaccttt tcttaggagt tcaacatgta ttg 343

<210> 2625  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-A7

<400> 2625

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acccaaatta aggtgagaga atggacgata aggaactagg caaaaggata tggatatctgc 120  
ggtagaacat atgaaagaag cagcaccgac tgtttagcat aaacacagca ctctgcagaa 180  
aagagaaaat gtaaagtata gagtgtgcgg cctgccaaat agtagagaag aaatcgatga 240  
aagtgaaagc gagtaaaaga tgaggtatag agaatggcgg tcctaacagt aaggatccaa 300

aggtagcgaa gtaaatagac gtttgaaagg cgtccagtat gaaaggagaa acgagtgtag 360  
cactgtctag tcgtccaact cagcgaaaca gcaataactg tgaaaa 406

<210> 2626  
<211> 402  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-052-Q1-E2-A8  
  
<400> 2626

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caactccgtt tacagggcca ctttctacac ttcacactgg tacagtaaag ctggataatg 120  
atgaaataga gcgttattta tctcaactga gaacagcgtc ttgcaagccc cttgcagaag 180  
aggatgtctg taaactgtgt gatatagcgc gggagctttt tattgaagag tccaacgttc 240  
atcctgttaa ttgtccaata actgtttgtg gtgatatgca tggacagttt cgctacttgt 300  
tagcactcgt taaaatacgt ggcaactgtt cggaatacaa ctgtcatttc atgggggact 360  
atgtaaatag acgatattac tctgtggcag caataactgc cc 402

<210> 2627  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-052-Q1-E2-B1  
  
<400> 2627

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ttcttctctg ccgttttttc aggagttttg atggtaacaa agttcttttc tttagtttgt 120  
tatttactgt atttagattc ctgccttttt tgcgttcaat atgttaattc caatagagca 180  
tttgaggaac ggaagtactt attttttcat tgcggtagta attcttttgt tcgtagctat 240  
tgctgttctg gccattctgt atgtaagggt gcttaaagga aatgaaagaa tgcgacttga 300  
gttgctgttg ggcaaggaga agacagcaac aataacagga acagtgaata gttagaaacg 360  
ttgatgttcg tagatattca ctac 384

<210> 2628

<211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-B10  
  
 <400> 2628  
  
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 ggtggcaagc tttgtcctca ttctaagtat aatctgtgcc attcatgcag taacagccga 120  
 tgaaataaca agtttcgaga gaggatacca aacagttgca ccaactcaga cgcagcaatg 180  
 tcaaaagatt tgtgtcaccg ccacacaaac tcaagttcaa agttgtattt aaactcagac 240  
 acaggctccg ttcatgtctc aatgtgtcac agcattgcc aactacctgct ataaatacgt 300  
 aacaaaatat aagcacgtgt gctgtgagca agaatacgag caacagaatt atcaacagca 360  
 gcaggtttgt caacagtatt tgcaactatc gtac 394

<210> 2629  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-B11  
  
 <400> 2629  
  
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 cggaagttgt agattcctct cctagtctta tcgttgcaat agcaatcgtc aactcctcga 120  
 atcggcctct tttcactcga acatatgaac atcctgactt ggtgctgcct agcgctagaa 180  
 caggagaaac gagagaacaa cagctacact atttactttt ccggtctcta gactttattc 240  
 ctggtgaagg aaaaagtgca agggagatga ccgcagacgg ctacttgggt tgtatcaacc 300  
 cacaagaacc acttcctata ttcgcatatg tcaccaatac aagtgtgaag attttattgg 360  
 cattggtatc gcgtacagct aatgatatga aa 392

<210> 2630  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-B2

<400> 2630

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aaatttatga agtgcacgtg cgcaattggg gaatgtcgtg ggggtgcaacc attcttttgg 120  
gttcggcatt ctactgagc tatacattta ccagacaagt acgagcattt acgagaactg 180  
gagtatttgg attgtatgca ggatttacct gcattttctg gtttatcctt atcattttac 240  
tgcctgagac gtatggaaga acgctagaag atattcgaca tatattcgat gaaggtttag 300  
ttggattggc aaaatacaac tggagtcaaa ccaaaacatg gatgaggacg acattaagga 360  
agcagcatgt agcagtcgat tctagcagag aatcggatga acttgcgtcg agcatatcg 420  
caacgaaaa 429

<210> 2631

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-B3

<400> 2631

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tgttgaatgc aacagcattt cacatatgga acttgacgtg aagaatgttc ctgcattttg 120  
cacaacagct ggcgattcac ttgataatgc tgacttgacc aatgcttggga aactattcta 180  
tgagcattat ttgtcaagag acggaattta tttgcatgaa gaggaaaact cttatgggcc 240  
tggggttcat attcgtatat ctgatgtcat gcagagttct tcgattactt gtgagggaga 300  
atcatcctcg gaacaaatat caaacctttt acagaaacaa aagaccgact tgataggtaa 360  
ttcattgaaa tgttttgatg actcatgttg cactgtaagc catgatat 408

<210> 2632

<211> 421

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-B4

<400> 2632

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tgttgtataa gctttctact agtgtggttaa ctattgcata catggaacgt ctccttgtgt 120  
 tgcaacgtat tcgatactgg ttgttggttg ccagttgtat gatgggtgtg gctttggtat 180  
 ttatgttgat gtttcgacgt tctttttggg agcgtgatga gttgtattac aaggccaaat 240  
 ctgttttaaag tcaatgttgc tatttgtact tgaaaatctt tttttctttt tggaatatgc 300  
 tgggtactacg ttgttgttgt tgtatcgagt gacatgtatt tcgtcttttg acaacacaag 360  
 acatgtgttt ttgagtagta taatacatat gcaagacggg tcgagacaca cacatatata 420  
 c 421

<210> 2633  
 <211> 425  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-B5  
 <400> 2633

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 cgcaaaaagt gaatgagatg ctcggtccg tgaatacgag ttctgcattg gaagcttttg 120  
 aaaggatgaa gtccaaagtg gaagaattgg aaccaagtgc ggaagcaagt gcgggtatga 180  
 ttggctctgg aaatgccaat ttggaacgac agtttcaggc attggaagga acttcggtcg 240  
 atgatgaatt ggcacaacta aagtcgagta tcgagtcttc ttctcgacct aaatcacttc 300  
 cttttcagca ggattccaat atagaagctg agttggaccg aatgaaaaga gaacgagatt 360  
 attcttgaac tgttcaaggg gggcaatgaa tagacagtat atatatatat atatataaag 420  
 ggtat 425

<210> 2634  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-B6  
 <400> 2634

caagcgtaga gcagaagaac tgggtgtaaa ggctcgagtag tagagtaagt gtaaaaggga 60  
 aaggaaagga gagaaagagg aaagggatga aatgcagaga tctctagaga aaggcaagaa 120



agaaaagaaa gtaagacaca gtaaatagagg cgagaaagca taggaagtga aacggattag 180  
gaacccgtgt agtctatgca gtaaaagaaa gaatgagtaa gaaaaaaggg agtcattcca 240  
ccaggggagt aaaggcgcaa gaaagaaacc caaagcaatt gacgggaatc ggaaaaaggg 300  
gtggatcacg taaattaatc cgatataaac cgagaacctt acctctccaa gaaggtgttg 360  
cacggctgtc gaaagaacgt gctgtgaagt gagagaacgt acgagaaa 408

<210> 2635  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E2-B7  
<400> 2635

cccacgcgtc cgtttgtggc attgttttga agaagagagg cccatcctca ccactacgac 60  
gagagaagaa accatgacta cgcagttaga aagaggagaa taaagcggtc cacaacagga 120  
agaagaaaat attcccaggg acgccaaaga cttggccacc tatgttcaaa acttgttgtc 180  
tcagatgcag agccgttttc aaaccatggc agactctata ctaggcagaa ttgacgagat 240  
gggtagtcgt atagacgaac tggagaagag catcgatgag ttgatggaac agactggagt 300  
aaatgaaggc gatggaacag agtctggtga gggttactacg acaagtcgtg gggagtgaat 360  
gcttcggttg tagtacgttg gatattctcc agagtatctc gtactatcta tcca 414

<210> 2636  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-052-Q1-E2-B8  
<400> 2636

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aagaatcgta aaagagaaaa tgacgatagg ttttgtacat ccacttgga ctagtggttca 120  
atgtaacaaa cactacaaaa ctgctacttg ttcttcccag ttttattcca agtcttcac 180  
gtttctaggg agaaaccatg ggggttgcaa gtcgtggtct cttgcctatg gaagcaaggt 240  
ggatcggaac aagtacactt acagtcatcc tagttccgta aaacaaggaa gaggaccaac 300

tatggttgct tcgaaaacag agttggaaca acaagtaaga tccagactag tcaagttggt 360  
 tgagcagaca ccttgcacgc ccatcatggt gagacttgct tggcacgacg ctggaacata 420  
 tgatgcac 428

<210> 2637  
 <211> 428  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-C1  
 <400> 2637

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 ttgttgcgaa gacactcgct gctccaatag atagagcaaa gattttgtta caagttcaac 120  
 cacttactcc tttgccctgg tatgctcgct atagaactgg tttggaggct cttaaaagta 180  
 agcggactat tgacagagtt tatattgctg acgttgaaaa ggaattccaa gagaacaggg 240  
 attctgggca tattggagag gaaatggagt gaatctactg agaacgatac cagggctctg 300  
 cttcaagttg ttcactctac aatactttaa agatcaattc ttccttccaa ggaaccaatc 360  
 ctacgatgga ttgatttga tattgcgtaa agtaggcgca ggcgtttcgg ctggtactag 420  
 cgctgtaa 428

<210> 2638  
 <211> 181  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-C12  
 <400> 2638

agcggacgcg tgggcgtatt cgcgcaatga gaggcaacgt gactatgaag acagaccctt 60  
 tttgaagttg gtgaaaccac ttcgtgaccg tcctatcagt tttatttccc caaatgatga 120  
 aaatagcagg attcctcatt agttggatag tacaataaat agttgttgag ctttatgttg 180  
 g 181

<210> 2639  
 <211> 419  
 <212> DNA

<213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-052-Q1-E2-C2

<400> 2639  
 cccacgcgtc cgaaaaggat atggtatctg cggtagaaca tatgaaagaa gcagcaccga 60  
 ctgttttagca aaaacacagc actctgcaga aaagagaaaa tgtaaagtat agagtgtgcg 120  
 gcctgccaaa tagtagagaa gaaatcgatg aaagtgaag cgagtaaaag atgaggtata 180  
 gagaatggcg gtcctaactg taaggatcca aaggtagcga agtaaataga cgtttgaaag 240  
 gcgtccagta tgaaaggaga aacgagtgtg gcactgtcta gtcgtccaac tcagcgaaac 300  
 agcaataact gtgaaaatgc agtaaactag cagtaggacg gaaagcacc ataagtcttg 360  
 actagatagg tttaaggang agagagaatc atgaagtaga cgaggtgggg taagagatg 419

<210> 2640  
 <211> 433  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-C3

<400> 2640  
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 tgtggtcact ggagccggag gattcctaag aaagttgctg gttgagaaac tctccaatga 120  
 cgaatctatt gaaacaatac tagcacttga tatgaaggag ccactcgaaa gcttagggaa 180  
 cttgcctaaa acacagaaga aagtggtaga tatcacgcac gaattgcaag ttaagaaagc 240  
 tattgaagga tatcaagtcc acggggtcgt ccacctcgct gctattatgt caagtttata 300  
 tgaagccgat ataaccagtg caatgaaaat aaatatgata ggtgcgatac atatgacgtg 360  
 atccgtagcg aacgaggcag caaatccaag atttggtatc tctagttcaa ttgccgcctt 420  
 tggaaatggt gcc 433

<210> 2641  
 <211> 404  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-C4

<400> 2641  
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 caactttggc tgcttctggt gcaacgtcta tttactcggt gtttcagagt aaaagagact 120  
 atacttttac agtccaaagc atagagctgg ctaatctaac agacgtatac aacagcagtg 180  
 tattggactt taccttcctt gttccaatg acactgcttg gaaacaatcc agagccaatg 240  
 tcactggtgc acttagtgca gcaaaacaaa acgtaacagg agcaatagcg tttctagaac 300  
 gcttgatagc agcaagcaca gtgaataaaa cggtaggagt tagtaagctc tctagtggta 360  
 cgaaggaggt tgtttcgctg gcaggtttac cgcttaattt cacg 404

<210> 2642  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-C5

<400> 2642  
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 tggctcgacc tggatcattt atgtagtggc agggatagag cgctcttgag tttgccccaa 180  
 gttttcaaaa gttccaagga caagggcaat cttctcgctc gtcaaggaca aggttctatt 240  
 gaagccccag gtaaagctga gagaattgca agacaaagag caggaggtat ccgtagtgct 300  
 gaagatgacg tcgtaccaga ggaacccaac tttctagcaa aggttcccaa acgggagcga 360  
 gatgggagag cagcttttcg tccttcaaag aagtcaaacc cgttctcctt cggagccac 419

<210> 2643  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-C6

<400> 2643  
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 tgaatagagc actatcacia ccaggagatg tattttctgt cttttgcaac atccagttgt 120

tggtgaatgc agaaagagct attataggaa atattacttg tccagaaagt atcgaattgt	180
gtcgtctatt agctggacat atagcggttt ggttcgatga acatttggat gactttcggt	240
tggaagctat cttgggagca ctattgtgta cttgttattg tgagtggaag cgttttgaac	300
gagaattggg ggtacaagaa tggaatgaat tggagaagat agcttcctta gatacttgga	360
agcttgtgct tgggtacaaga caaagagtgg ataatatgtt acagcgagtt acacag	416

<210> 2644  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-C7  
  
 <400> 2644

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caagcttctc ctctagagga cactttgggt gcctttatgc ggggtgggta tcaatcgcaa	120
agccaagcac caaacctag ctggtgcaag ttgaactgtc attataccca actttgtgaa	180
caagttatcg tccagactca acacgtcgtc caaactcagc acgtttacca aacataccaa	240
gtacagcaaa cacaacaagt ttcgtcagca tactgacgca atgaggtatc cagaggggga	300
tatggccaac agtctgtagc cccagctcct gcaccttcg tgtcagtgtt ccagtcaagt	360
gctgtattga ctgctcgtct tgctaccaat aagtttctca tcacgctcct cagcaagtat	420
ctcaac	426

<210> 2645  
 <211> 435  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-C8  
  
 <400> 2645

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atgcgctcgg gcgacacaga acgagaataa ctagggcaaa agacggaatg ccattcgata	120
aagagtaaac atgcgtgaca ctgggaatgc aacaaccgct ggttcgtctt ttgcatatcc	180
agccggtcgt gtcgttgtct cctgcgagtt agctccggta taacaaggct accaagcctt	240

cttgcaatcg ttcaggcttt atgtcgattg atagttcaag tgtattttgg aaaaagagta 300  
 atacaaggac gacttggctt gcattcttctc gtttccttcg tgggttgcta ctgctgtaag 360  
 tgctcagggg atactacagt gaaaccgaac caatcgagcg aggttttgct atgacagagt 420  
 gataagaacg tggac 435

<210> 2646  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-C9  
 <400> 2646

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 cgagacaaga tcaagtcttg gtatctttcc cagtcttatac cagtggcggc acaaaataga 120  
 atcaccgaat gtcttgcttt attacaaaat caaccaaca atattccttg ctatatccaa 180  
 caatatggaa taccgaagt tgctggtttg cgtgctttga tatggaactg ttgcattgaa 240  
 aaattctttg cggtcgattc tactacctct ttgcacgttg cttgttcatac gtattgggaa 300  
 tcgatcgcac aatatcagca acatccaacc gacgaccac tactggatag tagtaccacc 360  
 gagactgtcg tggaccatcc tctcaaccc 389

<210> 2647  
 <211> 356  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-D1  
 <400> 2647

cgcgacgact cgttcaactt tcgcaaggca aactattttc tgggcgcttc gagttagttt 60  
 gtacttgatg gttttcatag ttactagaat tggaagtttg atcaaccgct tttatcagtt 120  
 gacgcatcag ggatattcac cctttggtct catggtgctc catgcagtta ctcagagttt 180  
 gcaaggtttt ctatttggac ttacttatat ttaccacgaa agagcactag gggaagttgt 240  
 tctattcatt cgtcgcaagt ggagtcgcag aggggatttt cgcgaggatt cttttatcgc 300  
 attagagaaa agaggacttg cccatttttc acaatttgat gaagacgagg aagaag 356

<210> 2648  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-D10  
  
 <400> 2648

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agccacgcg tccgagtctg ctctgggtcg agttttgagg agaaggaacg ttgcaagtca   60
aagcaaccca ttctcgatat gctcttgga aattcggcag gtctgcatca aaatgttttc  120
cgtgactttt ctatgtggaa aagaaaagaa aggacattat atctcaaaga tgatctacca  180
gtgatggatt acaaattcat cttgatgagt tgggggtcaa cgatccatat gaaatgaagt  240
ctcaattatg gaaatgactt gccagggtta tttcttagca ttcatttggc ttccttatac  300
tggaaaactc cgatggaaag tttgtggata aattcagtaa aaagtataac agcagaatac  360
tctaattggga aacatttgtc gaaatttgcg ttttg                                     395
  
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<210> 2649  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-D11  
  
 <400> 2649

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agcacatttg gcgggattcc gagagagtgc atgttgtag aacaaacgtt tgctgttgac   60
aagactttta cgtttttata cttttcaatg tctgcagtgg aagtcttaca agtaaagtgt  120
ctaaataacc ctggttttctt tcgagaccgg ttttgttttg acataactta tgaagtgaga  180
gaagcgttac aacaagatat tgagtggaaa gtaatttatg tgagttgtgc caaagacgag  240
agtttgacc aagttttgga tgaagtactt cttccagcag atacggtggg tcgttttcag  300
tttacttttg aggtctcagc acccaatcca gacaaaatac ctagtgatga cttattgggt  360
attacggcag tattgattac ttgttcc                                     387
  
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<210> 2650  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-D12

<400> 2650

agcccacgcg tccgaagttt cttgggtctag gcagtctcgt atctgagcgt cgccatgaca 60  
atgaaaatac actttttggcg acagaattca cctttcagta ttctcagagc aggcaaaaca 120  
cccttttttag tacaatatcc atgctgcaga gttcgaatgt aataagaaaa atcgctcatt 180  
ttggcgcttg atcgaggctt gccatacgca tttcctcatc gctggaatgg aacatttcga 240  
gttattttac tatggtgaga agaaggctgt ctgagtgagg acatttgtct tcaaaataat 300  
tttttgcgag aaaggaaaat aacgtgagag tataagtacg gccagaaga ggcatttcaa 360  
atgaaaacta agatggaata atacgtctac tag 393

<210> 2651

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-D7

<400> 2651

aggtactcct cgaaagctat ataagtagcg tatgcaggaa agaagaaggt aaaggaagag 60  
aaggaagaag cagagaggga ctatgagcga gaaggtggat agtcgagagg gaaaaagccc 120  
agaagccaag ataaggatc aaagtaaga aagaaggaaa aggagaagaa gagagggtag 180  
gcttagaagc agcaaaccag agaggaaagc gttaaagcat gaaagaaaag aaatccgaag 240  
aagaagagaa aaaggtaaga aagaggaccg aatcagggtg agaggtagag gagcaagaag 300  
agaagagaga atgctgggtg gagtagcga acaagagaag ggaagtaaaa cgtaagaaag 360  
aggaaaggtt tacgagag 378

<210> 2652

<211> 421

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-D8

<400> 2652

aaaacaaact tgtggaggca gatgccatca ttttggatt tcctacacgc tttggatatga 60



tgtgtgctca aatgaaggct atgtttgact ctcttggaaca tttgtggcaa agcggtcagc 120  
 tggttgggaa acttgccgggt atctttgtat ccaccggtag tcaaggaggt ggacaagaaa 180  
 cgactgcttt aactgccatt actcagttgg cacacttggg aatgattttc gttccgacag 240  
 gttggaatat attggaata acttttcatg ttttgtgaat attggatagg atattcttat 300  
 ggcagtgata tgtttggttt aaaggagcct cagggaggtt ctgcttatgg tgcaggtacc 360  
 tttgcagggtg cagatggaag tcgacaacct tccgaatacg agttggctag agcaaaacat 420  
 c 421

<210> 2653  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-E11

<400> 2653  
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 agtagtgata atgaagtttt tgaagtagac acaagcattg tatccctttc tgaaacaata 120  
 aaaaacgtct tggaagacac ggaggatata gagagcattc ccttgccctaa tgtggaagga 180  
 cgaattcttg caaaggttat cgagtattgt agatatcact cactcttaaa gaccattccg 240  
 cagtctgagg aggatattga ggcgtgggat aggggaattcc taaatgtaga tcaaccaacc 300  
 ctttttcatt tgattctggc tgcaaaactat ttggatatca agagcttggt ggatttaact 360  
 tgtaaacgag tagcagatat gatcaaa 387

<210> 2654  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-E2

<400> 2654  
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 aagtgtaccc gttgcaggta aaaagccggg ggcaaaagtt gaaaggaaga aatcaaagaa 120  
 gaagagatcg gagacgtatt ccatttatat atacaagggt ctgaagcaag ttcattcctga 180

caccggaata tccgcaaagg ctatgagcat catgaattcc tttgtgaatg atatTTTTga 240  
gagaattgcg tcagaagcta gcaaattagc tgcttattcg aaaagcaaga cgcttacttc 300  
gagagaggta caaactgccg ttcgtctttt gttaccagga gaacttgcaa aacacgctgt 360  
atcgggaaggt acaaaagcag taacaaaata cacttcttct taacggtaca acaagtgctc 420  
aaaaggtggt tg 432

<210> 2655  
<211> 284  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-E4

<400> 2655

gaccacgcgt caggactagt tcgagatcgt gaggggattt cggttgggcc taggcgcaat 60  
ggcaactcgt gtggaaaact tgcgcggtaa ggagaccatg aagagacctt gcaaaggggc 120  
ttttgtggct cctgcctttc aacaatggct tccaaacact ttaaaaagaa ctgcctttag 180  
caaggatgcc tgttgtagag taagcctgaa gaagtgtttt tcgcgcaaaa ctaccgtttt 240  
tcaaacgacc agtcactatt caagaactat cattatggcg gatt 284

<210> 2656  
<211> 420  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-E5

<400> 2656

agcacacatt catgtttgcc tttcagtaca gcttatgttc cagttctatt tatctaagga 60  
gagttgcatg gaagagtatc aattatcatg gttaccctcg agttatcgta cctaataata 120  
gggtaatctt tccaagaatt atctcaagtg ctgccgatag tagcagtgca aaggaagggtg 180  
tcaagaatat cgttgataat atcaaggaaa aagggttctga aatatatcac tcagttgaag 240  
aaaatgtaaa gaaggaggca gaaaaagtat cagaaaagggt tgatgaattc aaagacgctg 300  
tgcaggatag aatggaaaat gcagatactt ccaaagcaaa agacgtagca agagatgttg 360  
tagataaggt caaagatgct ggacaatccg taaaggaggg tgtctctgat ggcaaagaag 420

<210> 2657  
<211> 163  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-E8

<400> 2657

gacccaagcg tcagcccacg cgtctgtcca cgcgtcagta caaccttggc ccgacttgta 60  
agtgaccaag gcgtcgaccc tggcaccatt atcctctatc accggtactc tcatatgggg 120  
ggagaaacac ttagagacct cttttcaggg ctaacctaaa gtc 163

<210> 2658  
<211> 396  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-F10

<400> 2658

agcgggtggat ttccaggctt cgatggagag tcaccataa cgttttacga tatttgttgt 60  
ggaatccgag agacgataga tttgcttttt cctgcggatc aagtgcaagt catagcagag 120  
cctgggcggtt attttgtttc atccgccttt actttggcta cgaggattat tgcccgtcgg 180  
tttcgaaccc aatcacagga aggagacggc agttgtctga aggcaggctt ttgtttgcaa 240  
gaagatatatt ctcgttcgag tcttgttgct gattactatg ttgatgatgg tgtttatggt 300  
tcgtttcgag atgtgatatc tttgggtgtg gtattctatc caaaacggt tagcagctct 360  
gacgacactg ctattgacta tgcacgtttt gttcgt 396

<210> 2659  
<211> 352  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-F11

<400> 2659

agcccaggcg tccggaacaa cttttgagca tcaatcaaaa ttctactgta tgctagttat 60  
gttaagtacc aagtttagcat acaagggtgc cgcggagttt aatcacacat gtcgttgcta 120

cactcctgga aacaagctcc ctcaaggcat tgatgttccg gaaagaagta aagtgggtcat 180  
 gcttcgtgac gaagatgttg aaagctatag tggtagtcgt atagtgtcag gttgaagaga 240  
 ggcctatacg tcgacagaga atccagggtgc gaagggtcaat gagaatcacg tcctgaaaga 300  
 catggtgtcg tcattggacc acatgagtct gaaaaggctg tcgtgagttg ga 352

<210> 2660  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-F12

<400> 2660

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 ggaaaggaaa ggagagaaag aggaaaggga tgaaatgcag agatctctag agaaaggcaa 120  
 gaaagaaaag aaaggaagac acagtaaagtg aggcgagaaa gcataggaag tgaaacggat 180  
 tacgaacccg ttagtgcgat gcagtaaaag aaagaatgag taagaaaaaa gggagtcatt 240  
 ccaccagggg agtaaaggcg caggagagaa acccaaagca attgacggga atcggaaaaa 300  
 ggggtggatc acgtaaatta atccgatgta aaccgagaac cttacctctc caagaagggtg 360  
 ttgcacggct gtcgaaagaa cgtgctgtga agtgagagaa cg 402

<210> 2661  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-F2

<400> 2661

cccaagcgtc cgcatttttc tttgggagaa aacgacgtcg tcgactcatg gcacctaaga 60  
 agacttcgaa agtagcacct cctcctgaag ctctggttaa aaaagaaaaa aaggagaaaa 120  
 agaaagagaa aaaccctctt ttcgaaagca gaccaagaa ctttggtatt ggtggagatg 180  
 tacaacaaaa gagagatgtc tctcgttttg ttcgttatcc cagatatgtt cgtcttcaaa 240  
 gacaacgaaa ggttctcatg tcgagactca aggtgccacc tgcgatccac cagtttacgc 300  
 ataccttggg taaaaacggt tccaaacagc tattccgctt gttaaatgaaa tatagaccag 360

agtcgaggtt ggaaaagaga aagcgcctac gtgaaatggc agaagct 407

<210> 2662  
<211> 443  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-F3

<400> 2662

ggctctagaat agcgggtcga ggcacgcgtc caccacgcg tccgcatttt tctttgggag 60  
aaaacgacgt cgtcgactca tggcacctaa gaagacttcg aaagtagcac ctctcctga 120  
agctctgggtt aaaaaagaaa aaaaggagaa aaagaaagag aaaaaccctc ttttcgaaag 180  
cagacccaag aactttggta ttggtggaga tgtacaacca aagagagatg tctctcgttt 240  
tgttcgttat ccagatatg ttcgtcttca aagacaacga aaggttctca tgtcgagact 300  
caaggtgcca cctgcgatcc accagtttac gcataccttg gataaaaacg tttccaaaca 360  
gctattccgc ttgttaatga aatatagacc agagtcgacg ttggaaaaga gaaagcgcct 420  
acgtgaaatg gcaaaagctc gag 443

<210> 2663  
<211> 425  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-F4

<400> 2663

acgcgtcagg attactagtt ctgcatttga gccttcgaat atgatggcca aatgcgatcc 60  
aagacacgga aaatatatgg cttgctgttt aatgtaccgt ggtgacgtcg ttccaagga 120  
cgtgaacgca gctgttgctt ccatcaagac gaagcgtact attcaatttg tagactggtg 180  
tccaacagga ttcaagtgcg gtatcaacta tcaagctcca tctgtgattc ctgactcaga 240  
attggctaaa gttcaacgtg cagtctgcat gatttccaac agcactgcca tctctgaagt 300  
ctttgccaga attgatcaca agtttgatct tatgtatgca aagagagcat ttgttcattg 360  
gtacgttggga gaaggtatgg aagaaggtga attttccgaa gcacgtgagg atcttgccgc 420  
tctcg 425

<210> 2664  
 <211> 346  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-F7  
  
 <400> 2664  
  
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 cacgttttgac ggtaacgatc gtaggctcaa ccgatggctc cgaccgggta cggggaacta 120  
 gcggtacaat aatgaagtgt attggagaag ataaccacca tagcaccatg gaagcttgtg 180  
 cttggtacaa gacaaaccat ggatgatatg ttaccgcgaa tctgcaagca ggcgagcaac 240  
 atggccactg aaaacacgtc caaacaaccg aaatcgcaact agagaatagc ggacgatgta 300  
 ccaggttgtg agaccacagtg gagaggagtg cactagggtcg ttggag 346

<210> 2665  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-F8  
  
 <400> 2665  
  
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 aatatagtga ttccctttgt caagaaagat acttttttgc tttggtctgt gaatgtgttc 120  
 ctgatcggtta gtctttatgc ttactacttt ttggtgaaag acgcgccagt cgccatgaga 180  
 attcgtggca tttggaggtg agcataactt gcaacggaaa aaaagggtcaa gttttgaaca 240  
 agtaaaagggt ttttggtctg gggtagttgg aagtaggcaa cggagatgat aatagaaagc 300  
 agtcgtcttt ttagctaaaa gaagaatgca ctaagtcaat gaagaaatat taggaagcaa 360  
 ctttacggaa gttatg 376

<210> 2666  
 <211> 167  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-052-Q1-E2-G4

<400> 2666

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ggttgtgtag aagaactctg tttcctgcaa tatagaaagg tatgtagttc acaacctttg 120

tacttcatta tctaggttgc tacgcttagt tgtgatagaa tacctca 167

<210> 2667

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-H1

<400> 2667

agacgatgat gtatttgctc ccaccaatga atacgtcatt ggaactgcca atatgttacg 60

cttagtgttt caagatattt atcctgtgaa catgcgcaag gaagaagatg aaggaacttt 120

gtttgggaga tttccagatg atatttatga tggctatact agtaacgttc caggaaatcc 180

gtggattcta tgtacttttag gaatggcgca atattattat gagttggcag cagagtgggt 240

gaaacatgaa aagattgtca taggaaagtg gagcaaagac tttttcagac atttgaggggt 300

tatgcctcct ccttctcttc ctcaatcttc tatatcaacg accattactg gaaaagcgat 360

ttgtagttat gtttctgcgc tattagaaga aagagatcgc gtattgaatg ctattcgaaa 420

gcataca 427

<210> 2668

<211> 387

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-052-Q1-E2-H11

<400> 2668

agtgccttag ttgccattac tttgggacca cgtggagctt tcctttctac tcattccaat 60

ccttcctgca tagaaaagaa tatcgcttgt tttccttggt tgtcgccagg aaaggccgtc 120

tttcgaccca attttcaggc gaaaggcact atcaacgcag ttggagcagg agacacattt 180

acagcaggta tattagctat gcttctaaga caagcacatt cttcatcttt cctatctttg 240

gaattgttgg cagatgttgg attggctgct gctatgcaaa gaattgactc tggagtcgaa 300

ccaaaaaacac tgcaaaaact tgttatgcaa ctcgatgaga tgccccgtgc ttctgttcag 360  
tccctttgat catttgtaat aaatctt 387

<210> 2669  
<211> 328  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-052-Q1-E2-H12  
  
<400> 2669

gaccaacgcg tcaaccacg cgctccgcaa gtattcaatc ctccaaagaa gcctatgacg 60  
gatgatatca caggaaagcc tctggtgaac cgctcggatg ataatccaga aactttaagg 120  
aagagattag aagcatttca taaaagtacg gatccggtga tccgtaatta tgagaagaaa 180  
ggtattttta gtcaaaaaaa tgcttcaaaa gaaatcgatt taagtatccc aacaagtgga 240  
gcaagctatt gaagaacgac aaaggactgc caatgcagcc tgaaagttgt tttgcaagta 300  
aaaagtgttg ttgttttttt gtgcgttt 328

<210> 2670  
<211> 400  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-052-Q1-E2-H4  
  
<400> 2670

tccggaaaca ttggttgctt ggaataattg atttgaggtt ggacggaaac actcgtgatt 60  
tggtacaaca ggctgcggat tacatcgctt gtaaagaata taaagtttcc gatatatattc 120  
gaaaacgtct gtatgaaaaa gacacgaggt ttgcctttct ttctccaaag cggtcgcacc 180  
acgaagaaat agtaagagaa ctggaagaaa cagtacaaag actgggagcc aaaagaaagc 240  
ataaaacaca acacacctca gcgaaaagat atagaaaaac tacagaaacg gaagattatg 300  
gagacagact gtccacagtt tctatgggta ccttggcctc atatatgaac cgccacaagg 360  
aaagagtgcc ttatcaagta cttgatatgg aagaaatact 400

<210> 2671  
<211> 368



<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-052-Q1-E2-H6  
 <400> 2671  
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 cccaagttgc tgatatttta atggacaagc agcaatgcga aatgctacaa gaacaagtga 120  
 aagaatactt gttacgttaa ctgggtcaaa acccggtgaa ctcaagggat gaccaggagt 180  
 tcccagagtct atcaaagacg atcgaatcct tggttcgaaa tccagctcct caaggtgaat 240  
 ccatcattct aataggacct gcaggctctg ggaagaagaa gctagtagag gaaattgtgc 300  
 agaaaatgaa atcagaaagc cagactcaac gtttgaaagt gattcaactg tacggaactt 360  
 ttcattgct 368

<210> 2672  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-A1  
 <400> 2672  
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 tctttgtatt tagcattatt ttggcaaatg ttgttcttac tattcaagca gcaacgggtt 120  
 tggagacttt ggagtcactg aatatatacag agtatcttga catggtaaag gctgcaggcc 180  
 tggactcgaa gttcaacgac tctgctgtta catggactgt ttttgcagca aactactactg 240  
 gagtcaatgc caccttggca ccaatgcact tggttatttc taatatcaca tctaattgca 300  
 cggagagcat agacattgtg gaatatagct tgtacaacca tactcttttg tcaaatgata 360  
 ataagacaag gagcacctat ccttaccgcc gtatacggaa tgaatttgac tgt 413

<210> 2673  
 <211> 364  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-A10  
 <400> 2673

gagccacgcg tcaatggaaa gaatcgctca agaaagagtt attctttgcg atatatcggt 60  
tctctggttg cggacgtaca tagaacttta ctttatggtg gtatatttgg ttatcctgga 120  
gataagaaga atcctaattg caagttgcca ctgctttatg aatgtgctcc gatgagttat 180  
ttgattgaac aagccggtgg aaaagctacc aacggaaaac aacgtatttt ggatatcggt 240  
ccaaacacga cccatgaacg acagcctctt atttttaggtt cggaagaaga cgtcgatgag 300  
ttgatgcaac tctacgcagc caagttgcaa agtaaagtct agttgtgtct catggttgtg 360  
atga 364

<210> 2674  
<211> 365  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E1-A11  
<400> 2674

gcgtcaaccc aaacgtccgc atggacctat tgcagcacct acaccaccac tagcgtacca 60  
tctcaatgca gcaaggccgt gactacctat actcaaact gctgtgctta tgcccaacaa 120  
acttcctatg cagtcagtac cgagcaatat gttcaggaaa ctgtatctgc tcaatatact 180  
tcttactacg gcgaatcatc ctccagctat tattaccgag cagctgctcc tcagagatgg 240  
tatgaggaac aatgcacctc atactgctgg gttccagtac agacctatga aacttatcaa 300  
tgttctcaag agaagaagaa ggagtacagc tctccttgtc aaacttatga gcaggtttca 360  
actac 365

<210> 2675  
<211> 354  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E1-A3  
<400> 2675

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tgcgtttggc aattgatcat gtaaactctca ccattgacag tcgaaacact cattgatggt 120  
acaaacttca acttgtgata caacattgag aagaagtacg actcagtttt gtcccaatac 180

aaatatactg gtccatgtca ttacatccgt acgatcaact tttgcttaag gggatcgttg 240  
gcttgatgaa gaggagactt .gggaggagaa tactcataat aataatgagg atgatgagga 300  
tgatgggaaa gagtcgcaac aacaacaaga agaaaagcgt ttacgcaaga tggc 354

<210> 2676  
<211> 421  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-A4  
  
<400> 2676

cccaagcgtc cggaacaag cattggaaga aaagaatcta ggcaatgaat attataagaa 60  
gaaacaattc caacaagcta tcgaacatta taacaagct attgaattgg atccttgga 120  
tttatcttat cttacaaaca gagctgctgc ctatttagaa atgggcgagt tggatagttg 180  
tattgaagac tgtcagaaag cagtggattg gaacaaggaa tataacttga gaacagatta 240  
taaaataatt gccagagctt atgcaagaat gggcaatgct tatgcaaaga aacaagatta 300  
tgacaaagca atcgaatggt atgagaaatc gctgttgga tatcacgacg acaaagtata 360  
ttcgaaaatg gtacgaaatg aagaaactca agaagaaatt ggaagaagag tcttatatcg 420  
a 421

<210> 2677  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-A7  
  
<400> 2677

aggccacaac caaacttttg tattgttttt gattgtgatg gtgtacttgt aaactcgga 60  
ccttattctt gtgagtcctt tcgacaagct attcttcgag ctactggcgt ggatatccca 120  
cacgagtttc caaacgacta ttttgaagtg tttggcttat ctgtctattc ttccattgaa 180  
tattatgtga aaaagggaat tctacccgaa aacacagata tcgatgggtg ggctagaaaa 240  
gtgaatgagt tgaaggatcc aatatatgaa gaattagcaa gaggaaagtt atcaactttt 300  
cctggattga aggctcttct tgaggaagct tgtgcgaaaa aggttgctct aggtgttggt 360

tcttccggga acacgggaaa agatccgatt caatctaaaa caagcaggca t 411

<210> 2678  
<211> 259  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-B11  
  
<400> 2678

gcgtcaaccc acacgtccgc tcacgcgtcc gctcaacgac gtagtgagac tcaactcagat 60  
tctctttgta ttgttctatt catctcgtat tccctatcgt tgcagtagct aatcctgggg 120  
tcagtaaadc gtgcctcttt tcaactcgagg ggggtgaacac tctgatatgg tgctgcttat 180  
ctctggggga ggagaactga tagaacacca gctagactat ttatttttcc ggtctctaga 240  
ctttattcct ggtgaagga 259

<210> 2679  
<211> 142  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-B6  
  
<400> 2679

accaagcgt cagccaactc accaagatga atttgtaac catcactggt agatcatctt 60  
tgagatctaa ggtcctttct tttcttttct atatggaaaa ttcagggaga aatggtttgg 120  
tccagagctg ccgaattttc ca 142

<210> 2680  
<211> 60  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-B7  
  
<400> 2680

accaagcgt cagcagacac gtagggtcag gaatattctc gaagaagatg caattaagtc 60

<210> 2681  
<211> 98

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-B8  
 <400> 2681  
 actcacgcgt cagcccacgc gtccgaaaaa aaatagaaag agaaaaaaag gagaaaaaaa 60  
 ataaaaaaaa aaaaaaaaaa aaaaaaaaaa aagaagat 98

<210> 2682  
 <211> 238  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-C1  
 <400> 2682  
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 atgtggttca atgacttgag tacttttcca gtgacgtatt cggttcttct tttatgtgtc 120  
 attacttggg aataagatat gcctgttggg gactagttac cgagttgtta ctacgttggt 180  
 tattacttat caaggttggg cttatgatat cgttggttgg aactacgata gagttggt 238

<210> 2683  
 <211> 275  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-C11  
 <400> 2683  
 cacgcgtcca cccaagcgtc cgcgcattgc tccgcccatt cgtccggatg ctcatccag 60  
 gagatcgtca aagagcaacc agacttcgag ccacgagagc actcaggaag atggtctaga 120  
 ggatggtatt caaagcaata ccgtggagac cgatgtgtca cctccagggt gtttaggcatt 180  
 tgcgaatctc gactagttgg ctgaacacgc ggctcagagt ctgctcctcc ctacgacgga 240  
 acgctctaga cagtcccacg catggaggcc gtgaa 275

<210> 2684  
 <211> 284  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E1-C12

<400> 2684

cacgcgtcag ggaaacgatg agaccgatga tcgggatgag ctgcagagat ctcccagaga 60  
agagcatgat ccgagcagac cggaagactc agtccatgag gccagagagc ctgatagggtg 120  
agacggaggt cgaccccggtg ttctcggttg catcgaagtg ttaccgagtc gtagtttagg 180  
gagtctctcg ctacggggac ttcgggcagc atgctgcacc cagtctcgcc tgacgtgaga 240  
cggaaacgcg ggtggattcc ctccattgat gcggtcaacc cggt 284

<210> 2685

<211> 424

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E1-C2

<400> 2685

gcgtcagaga gaagagagaa tgctgggtgg agtagcgaaa caagagaagg gaagtaaaag 60  
gtaagaaaga ggaaagggtt acgagagaag gaagtagaaa gaagagagtg taaggcggcg 120  
tcataataga aatccgaaag gagtagaaga aaagagagag aagaaagaaa agaagagaaa 180  
agccgtactg aagaccgaca cagggtactcg aggagaaagg agacccaa at taagggtgaga 240  
gaatggacga taaggaacta ggcaaaagga tatggtatct gcggtagaac atatgaaaga 300  
agcagcaccg actgttttagc aaaaacacag cactctgcag aaaagagaaa atgtaaagta 360  
tagagtgtcc ggcttgccaa atattagaga agaaatcgat gaaagtgaaa gcgagtaaaa 420  
gatg 424

<210> 2686

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E1-C3

<400> 2686

gcgtcagccc aagcgtccgg tgatcgcgac ggagaaacgt atgccgtcca ttcttatgga 60  
aagtcatact ttagaaaaga tatcttttat ttcggaaact acaggaatgg tgtattcggg 120

tatgggtcct gattcaagag tattattgag aaaggctcga aagtttgctc aaagttacta 180  
tcaaacctat aaagagccca taccagtcgt tcaacttgta cgagaaacag ctttcggtat 240  
gcaagaattc acccaatctg gtggcgtaag gccttttggg gttagtttgt tgatagctgg 300  
ttgcgatgaa caaggaccac acctg 325

<210> 2687  
<211> 416  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E1-C6  
<400> 2687

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ggagcttata tgtctgacgc tactgtagcg tctctattta gcgtgaaaat gttgttctac 120  
cttacaatac ttgcgttctc tatcactatt gtgggtctta tgggtaagag ttccgacggt 180  
at ttgggttc acagtgttcc agcgaaagac gaatattgtg catacaagtc ttcccttcaa 240  
gtaaaccacc acggcatagc ttcctattgc aagtatatca tggctgtagc agctattggg 300  
ttggttatca gttcttcga gttttgggtat gcattcctcg gaattttctt caagtggtcaa 360  
caaaagtgtg ggtatattga atctgctatc aacgtgtttt tctgggcttg gtggtt 416

<210> 2688  
<211> 357  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E1-C7  
<400> 2688

agggtgggttg tggagtaagt ggcgttggca gcaaactaaa agatggcaag aagaatcatc 60  
ggagcttata tgtctgacgc tactgtagcg tctctattta gcgtgaaaat gttgttctac 120  
cttacaatac ttgcgttctc tatcactatt gtgggtctta tgggtaagag ttccgacggt 180  
at ttgggttc acagtgttcc agcgaaagac gaatattgtg catacaagtc ttcccttcaa 240  
gtaaaccacc acggcatagc ttcctattgc aagtatatca tggctgtagc agctattggg 300  
ttggttatca gttcttcga gttttgggtat gcattcctcg gaagtttcgt caagtggt 357

<210> 2689  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-C8  
  
 <400> 2689  
  
 agcccacgcg tccgcccacg cgtccgaaat attcgtagaa tggaacaaat attggttgag 60  
 agtcaaaaca aagcgcttgg acaggtgaaa aaggagcct tgtctataag gtcggtgaac 120  
 cacgtttcct tttctgtacc cgaaccagtg aagacgggca agttcttttg cgagattctt 180  
 ggctttcgag tggttcgacg acccaacttc aattttgacg gtatatgggt gtacagttat 240  
 ggtattcaaa tacaccttat cgaaggtgct gctctgaaa gaccaaataat cttgaaacca 300  
 aacacagacc atatatcttt cgaagcggat gacctcaca gtatacagaa taaattggac 360  
 actttaaata atccgtatct tttggagtat cacgaacggg agaacttgag acag 414

<210> 2690  
 <211> 255  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-D1  
  
 <400> 2690  
  
 cgacacgggt ttcttgtcct ctaagcggtt gcctttgcat cgttgtggga agaacacaac 60  
 aaccttccca agccgccact ttccaaaatt ccgccaacca ataagaccaa gattggaatc 120  
 caaggccaaa tgggtgaacaa gtttggcaaa agatatgaac cccaaggaca gagaacaagc 180  
 caccatccct tcgggggaaa ataagttggt gaaaactccc caagttgcca actttgaaga 240  
 tatgggatat aaata 255

<210> 2691  
 <211> 329  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-D11  
  
 <400> 2691



atagatacgc ctaactgtag ttcacgattg atattgctgt cttgtttggt ctttataacg 60  
 actataactt tggtaaatac acaacgaaac tattataaag tgctgggcgt ggaaaagaac 120  
 gcttccgaga gtatgtgggt tagcgttcat tctccaagtt tctttgactt ttgttacgag 180  
 aaattaagcg cgcgtatcat caactagcaa ggaagtatca cccggacaag aacggcgggtg 240  
 acaaccacgc ggaactgaca tttcgagaaa tatctgaagg taagtgtgg taacatgttg 300  
 gcttcctgct tcttttattc cagttgttt 329

<210> 2692  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E1-D12

<400> 2692  
 aggtgagcga aattcacttc cttagtaact atgcgatgtt aattttgagt ttcacattta 60  
 taggaaattt ctctaaaatt gacgattttc ttttattttt ttaaagttgt ttaaaaataa 120  
 tttcaacagg tatccaaggt tctttttata gttcttgtga ttgcccgtac ttgggtggga 180  
 ttggtttatg cgaggggcgt ctgttttatt cgatgcccggt tccaagttc ctcgctcagc 240  
 tccttattgt gggcgggtaca tacttatttc gtgcgtttct tgaagcttac aagcaagctc 300  
 tgtacaacgc tcaagtaaga agcactgcag cgggagcagc aagtcaagtt tttcgtgaag 360  
 aaggaaaaat gtccgtcgaa gaagcttgta atat 394

<210> 2693  
 <211> 256  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E1-D3

<400> 2693  
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 ctgtacaatc gctttcataa tctacggatt acgattotca ttgcagctaa ttagacggaa 120  
 ggtaggatcc agagcctcaa tattaatcag gtgtagcaaa agatagttcc accaagaaca 180  
 ctgaccaaga cagcattctt tcaagagatt attatgtgtg ccaaactccc agattcgtcc 240

cagttaaaca caaggc

256

<210> 2694  
<211> 412  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-D5  
  
<400> 2694

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tccctagcac aacacggatt tgcacgcaac tctatgtggc acttgaaaca aataggtaca 120  
acgaaagatg gctcagccac tggagtcgtg ttgtctttat cttcaaaaga tgtggatgct 180  
gcatggacct ctgctgggcc ttacgctttt actgcccaat atcagttggt attagggttt 240  
caaggtctac aaaccaatth ctgggtacga aatgaaggag aggagtcctt ttctttcacg 300  
tttgcccttc acaactatth tgatgtatct gacgtctcta gttgtcaagt atttggattg 360  
gaaaataatc cctaataaga atcgtcaaaa gaatgacgag tggaatgaac ga 412

<210> 2695  
<211> 417  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-D6  
  
<400> 2695

gcaatatgcc tagtcataag gaacaaaata aaggaattaa aatatcagct gacggttacg 60  
cactaaagtt gagcggattt cggttggacg tagacggcag tttggtcact atggtggacg 120  
cagacgacct cagagccctc atgtttaagg aaagcctcaa ggaaaagtca aagctgcatg 180  
accctaaaatt tttcaaaagc tattatgagg agaataagga ctacttttat tatatgactc 240  
atacggagaa gaaaatgttt ctttctctgg aagttgcacg agaatacgct actctggtgg 300  
gaaactcgtt tctgcagaaa tatttggaca aagtcattga gcacgaacac gcatactaaa 360  
ggaaccaacg ttgttgccga taatttgccg tggtttgtct gtttgcgttc tgttggg 417

<210> 2696  
<211> 410

<212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-D7  
  
 <400> 2696  
  
 aggagctta caaatgtgag gaagccactt ccgacatttt gcgtgatatt gccaaaggaaa 60  
 cgtccaaaat gttgcgaagt ttagaagaag gagaaaaaat ttccaacctc ggttccaagt 120  
 ttcgagactt ggttcaccaa tgtttgagta ggttcgacag tgcagtttct gatgtgaatt 180  
 ccagtgtttt ggtgtcacga aaacgaagag aacttgaagc aatcattgac acctcattaa 240  
 atgctgtctt tgtgaaacaa ctgcagggtt tacgtgagaa tgctttgtcg cagttcaagg 300  
 cttccttate ttcggaagag gttccgagcg attttgcggt ctttactgcc gacagtatgt 360  
 ttgttcgaaa agcggaagga cccaattcgt cctggaagtg attggtcgta 410

<210> 2697  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-053-Q1-E1-D8  
  
 <400> 2697

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 gtatctgcgg tagaacatat gaaagaagca gcaccgactg tttagcaaaa acacagcact 120  
 ctgcagaaaa gagaaaatgt aaagtataga gtgtgcggcc tgccaaatag tagagaagaa 180  
 atcgatgaaa gtgaaagcga gtaaaagatg aggtatagag aatggcggtc ctaactgtaa 240  
 ggatccaaag gtagcgaagt aaatagacgt ttgaaaggcg tccagtatga aaggagaaac 300  
 gagtgtagca ctgtctagtc gtccaactca gcgaaacagc aataactgtg aaaatgcagt 360  
 aaacgaacag tacgacggan agaccgcata attcttgact agatagggtt agggaggaga 420

<210> 2698  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-D9

<400> 2698

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gaggtggagt ggctaccttg ggtttgttgt tcagacactg tcgaaaacgc aatagtatgg 120

gaagacatac tgggtgcttca aggcgcctaaa ctgctggata tttatgctga aggattacaa 180

ctgttcaaca agtttcgctg tcacctgatg aacgtgtcct ttgtgggaga cagcaaacta 240

tgggattcac tatctcgttt cttgctgttt atccaaccga gtcattctac ttgttggaac 300

tttcgaaagt ttctcgttca acaccatcac gtttcctatc ttatggagct aaaagtgagt 360

gaaattgcct t 371

<210> 2699

<211> 395

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E1-E11

<400> 2699

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ttggcgctag ttcttgttcc tggttggttt accgcaatcc tcgcaacttg gctaaatgct 120

tcccaacaaa ggaacataaa attttccgct gcgctaccac acacacgtgt aaaactacta 180

tactggcggt agacaagctg tcttcttcaa ctagtaatgt tggcaagaca gaacaaagca 240

agccttttga accgaagaag agtgaagagg caaattcctt tcaacagtcc ttttctagca 300

tgccttcgat gcaaaataac tggttttcag atccttccaa gttcaacgcc aaagtacaag 360

atgtagctca agacatactc catagaccta ctttc 395

<210> 2700

<211> 347

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E1-E12

<400> 2700

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aaacgttcag caagagcaaa caattatgtc agttttctgc atcttctgaa agggcaagaa 120

atccacaaca cttgcgcttt tctcggcata tgtccttgag atatatcttt cggcctgtgt 180  
ctccacttta ccaaagcatt cagaggccga ctccttgag atgtttccta tgtaatttat 240  
gcatagtacg tactacaaag gatttgtcag tactatgttg atgaaaataa ggaaaagagt 300  
ctgtctcctt gttcagagct attgtgtttg gcgtgcacga actgtcc 347

<210> 2701  
<211> 349  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-E2  
  
<400> 2701

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gttgttttgc ttggaagaga gtagaggaag tcattcaagc gttaaagaca gagaccgaag 120  
caactgcaga ttctacaagc aagtttgcac aacaagcctt ggaacagata ttgaaagggt 180  
ctccaacgag tctcaaagta actttggagt ccatcgaaca agcttcaaag atgacattga 240  
agcacacctt acagaaggat ttccgtatgt cgatgcactt tatgaaaggc cacgactttt 300  
atgaaggcat tcgagcaact ttggtagata cgggtagaaa ccctaaatg 349

<210> 2702  
<211> 418  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E1-E3  
  
<400> 2702

agagaaagag gaaagggatg aaatgcagag atctctagag aaaggcaaga aagaaaagaa 60  
aggaagacac agtaaatgag gcgagaaagc ataggaagtg aaacggatta ggaacccgtg 120  
tagtctatgc agtaaaagaa agaatgagta agaaaaaagg gagtcattcc accaggggag 180  
taaaggcgca agaaagaaac ccaaagcaat tgacgggaat cggaaaaagg ggtggatcac 240  
gtaaattaat ccgataaacc gagaacctta cctctccaag aaggtgttgc acggctgtcg 300  
aaagaacgtg ctgtgaagtg agagaacgta cgagaaagcc aagtgagggg aaagagggaa 360  
gttaaagggc ggccccagaa aggagagggc gtaagacgtg atacagagta ggaagaaa 418

<210> 2703  
 <211> 327  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-E4  
  
 <400> 2703  
  
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 cggcttgttc aagggtcatga gtgaataatg tcactaggtc atatgatgta attccgatta 120  
 tcataccagt gtaggctatg cacatagggc gaaataatga cgtacaagtt taacggagtc 180  
 attccaccag gggagtcaat gcgcaagaaa gaaacccaaa gcaattgacg ggaatcggaa 240  
 aaaggggtgg atcacgtaaa ttaatccgat aaaccgagaa ccttacctct ccaagaaggt 300  
 gttgcacggc tgtcgaaata acgtgct 327

<210> 2704  
 <211> 351  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-E5  
  
 <400> 2704  
  
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 tggttgtgat atcacagaaa atttctagtt atgtgaatca acattcggaa gaatatatac 120  
 accgtttgag ggaagccggtt gctctggatt cagttagttc ggatcccaat aaacgctcgc 180  
 gttgcttggga tatggccaac tatatttgca aatggatcga aaaattggga ggaaagccta 240  
 ttgtaaagca tataggcaaa caaacgtttc ctgatggcca agttttggac ttcctcaca 300  
 tcctatttgg agactttact gtggacacca gggagaaacc agtgctcttg g 351

<210> 2705  
 <211> 363  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-E6  
  
 <400> 2705

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 ttgatccctt agatacggac aaggacctgg tatatcctga gaaatattat gaggccttgtg 120  
 gaggcgaaat gtggatcctt gaaaaggata acacagtggg tggctgtgct gcctttttgc 180  
 ctattcctga tacgtgtgcg gtagagtttc gaaagatgta cttttctcct agcataagag 240  
 gcaacgggta tggaaagcta atacttggag ctttagagta tcgagccttt gagttgggat 300  
 acacataggg tagattggaa acgtcgcacc ttttagaagc tgcttgcaag ctttacgaca 360  
 aga 363

<210> 2706  
 <211> 87  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-E7  
 <400> 2706

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 tgcgctttga tcccctagat agcgaga 87

<210> 2707  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-053-Q1-E1-E8  
 <400> 2707

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 caaactttat gtgggttcta ttcacttttc tattagtga gaagatttac gcactatttt 120  
 tgagcctttt ggggaagtcg tttccttgca gcttcacaag gaccctgaaa cgggacgttc 180  
 acgaggtttt ggttttgttc aatacagaaa ccacgaagat gcgaaaaagg cattggaaca 240  
 attgaatgga cttgatcttg ctggtaggcc tttaaagggtt ggtttggcaa ctgcagagac 300  
 tcagaaactt caagtaatgg gtgctattcc ttcgggagtt cctagtacaa tagctgcgaa 360  
 gagcttatca ngtagggggtt atagtgcata tattagtgan atggatg 407

<210> 2708  
 <211> 346  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-F11  
  
 <400> 2708  
  
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 gtgacctaag gtcgtgacca gttataatat atttagtgca tagtaaacc tgtgtcgtgt 120  
 gcgcgggtcc catgtcttat catagagatt gcgatcagta ttgggcttat gctaacctgt 180  
 gacttggtag atcgcttggt gcagcttgta gactccgagg taataatcct tcaactctctc 240  
 cagtcggttg aacaccacct caatatctca tcatcctcat agtcgccttg tgttactgag 300  
 aacaccccca cagtggactc ctgtatcgag aaaactgggtg acgacg 346

<210> 2709  
 <211> 242  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-F12  
  
 <400> 2709  
  
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 tcctagggtc gtggccagct ctactagttt cactggatac tacgaccaat gtcccgtgcg 120  
 cgggtcccat ggcttttcct ggacgttgcg ttcagtatcg tgatgacct gccctggcat 180  
 ttgtgagaga gcctgaagca gaatgtggaa cagcaggagac gagtccgtcg ctcggtccag 240  
 tc 242

<210> 2710  
 <211> 341  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E1-F3  
  
 <400> 2710  
  
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 atcatatcaa cgaaggaatg gagaatatac cgaacgatta catgaaggac gagatactac 120



gagaaatgat aaggtggata tatatatcga taataagtgt gacagtaata tacacgagga 180  
gaaagacagg aaagaggtgt atgatgcacg caaagaagtg acgcactaga tcagagagta 240  
acacatgcac gtacgtaaag ccaacgggtg actcaagacg tgtgaaagag tggaacaaca 300  
tgaaagcaca caagaatgta cgacatgggt acagtcacca c 341

<210> 2711  
<211> 416  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E1-G1  
<400> 2711

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gcagttgcag ccgacgtagt ttcagaggag agatggggat atgctcagca aaccaacaa 120  
cagcaacagt gccacaagt atgtaaacag tatgcatact atcagagtcc agtctgcact 180  
tccgtaacca cacagagccc atactggacc caatgctcga agactgtgca aacctttgtc 240  
ccaagccagt gcagtactta tacccaatct cctacatgga cctattgcag cacctacacc 300  
accactagcg taccatctca atgcagcaag gccgtgacta cctatactca aacctgctgt 360  
gcttatgccc acaaaacttc ctatgcagtc agtaccgagc aatatgttca ggaaac 416

<210> 2712  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-053-Q1-E1-G12  
<400> 2712

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ccgtttcagg ctttccatat ttaagatctt ttttgattgt tattgttgct attctgggtga 120  
cctcttttct ctctggaag cagcaaaaa cagtccacaa ggatgctccg ttattgacaa 180  
gctcttattg cagaagcttc tctgggccta gctttccttt cgtattgcgt tctacaagag 240  
tagtgacgga taaaggtatt tatattgtct tgtttgcttg tctaagtttt cgtcgttagg 300

aacttttccc gcttccatat ttgtcgatag cgctggtttc atctcgagag tagttcctgg 360  
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<210> 2713  
 <211> 126  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-G2  
 <400> 2713

gcgtcagtga aacaaacttt gcgaacggtt gtaggagtgc atacgacaca cacaggagta 60  
 tgctttcctg ttttgtatac tgaattgagt atacctagtg tagaatcact tagagaagaa 120  
 cgccgg 126

<210> 2714  
 <211> 288  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-G6  
 <400> 2714

agcggacgcg tgggcggacg cgtgggcgga cgctgggagc aggatcgaat gcagacgctg 60  
 tagttttgtg attgtttcgt gttttgtcaa gcttgtctca gtaataaaaa gtgacatttt 120  
 tagttgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg aaggcagcaa aaaaggataa 240  
 aaaacttacg ttaacgtgaa tgaaaattta aaaagctttt ttaaaggg 288

<210> 2715  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-053-Q1-E1-H3  
 <400> 2715

agccccacgcg tccggggcaa ccaactacca ccaaaagtag caactgcaag gaagaacaga 60  
 gtgtcctaaa gaatagcaag ttgtgatgag gagaattggt agcaaactct tgtcttattc 120

cgccaatgaa gtaaaacttc gggatgttgt ttcttctcta agggagacga gtaaagcgac 180  
 ggggtcttcc atccggagtt ggcttcgtga tatcaaccag tggatgaag acacttacta 240  
 taaaaagga aaggtggatc ctttggta tttatgtta ctttgttttg gagtgggata 300  
 taccatcaat tactcccata tcaaacataa agtggagcat aagaatgacg atattgaaag 360  
 cttgttaaag tcancnttgt tgtgttggg tgatggctga cgcatagttg gtgatat 417

<210> 2716  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-H6  
 <400> 2716

agccaaaagt ttcaaactgt gttgttatga ctatgccatt ttgctttgta tttgatacga 60  
 cttttaagtt ttcaaaaatt ccttatcgaa ggtcttctac cgacctatgt aaacccaagc 120  
 accgttcgtc tccattgaaa cacaataccc aagcggctct cttcaaggag accgaaaaga 180  
 caaagtctac agaacctgtt aatgttacca gcgctcccaa ctcaaactca aagtcgggtca 240  
 catttgacgg acagttgaat aagtctgctt ctaatacatc tccacgaacc aatatatctc 300  
 tggactctgc aaagttaaag gagtactctt cgaagtttct caacgatatt tctttgcgac 360  
 ccgggttcta cggccaactg gcactagctg gtctagttgg aatcatttgc atacagataa 420

<210> 2717  
 <211> 357  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E1-H8  
 <400> 2717

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 tgcaaagcgc tctcggaggc gtatgcacag ggatagccag aaaactagcg aggaattctt 120  
 aaatctcaag gagtatgtga aggagtagtg taaataagcg cagggtgcta tttgagtagt 180  
 aaaatgtaaa ccgcgtgtct tttgcatcat gtcacagcta gtgatagggt aagcagatag 240  
 cattggctca gacgtagcca tgtaacaccc gatactactt gatcttatgc tgtccaaacg 300

acgtaaagct ggaccagtat ctgtgagaac agatttggca gagatggcat aatgggt 357

<210> 2718  
 <211> 350  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-A10

<400> 2718

atggaaagaa tgcgtcagga aagagttatt ctttgcgata tatcggttct ctggttgcgg 60  
 acgtacatag aactttactt tatggtggta tatttggta tcctggagat aagaagaatc 120  
 ctaatggcaa gttgcgactg ctttatgaat gtgctccgat gagttatttg attgaacaag 180  
 ccggtggaaa agctaccaac ggaaaacaac gtattttgga tatcgttcca aacacgaccc 240  
 atgaacgaca gcctcttatt ttaggttcgg aagaagacgt cgatgagttg atgcaactct 300  
 acgcagccaa gttgcaaagt aaagtctagt tgtgtctctt gggtgtgatg 350

<210> 2719  
 <211> 412  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-A11

<400> 2719

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 aatgcagcaa ggccgtgact acctatactc aaacctgctg tgcttatgcc caacaaactt 120  
 cctatgcagt cagtaccgag caatatgttc aggaaactgt atctgctcaa tatacttctt 180  
 actacggcga atcatcctcc agctattatt accgagcagc tgctcctcag agatggtatg 240  
 aggaacaatg cacctcatac tgctgggttc cagtacagac ctatgaaact tatcaatgtt 300  
 ctcaagagaa gaagaaggag tacagctatc cttgtcaaac ttatgagcag gtttcaacta 360  
 cttaccagtg tggtcagtac gagtcccaac aagtttacta ccaatgccaa aa 412

<210> 2720  
 <211> 338  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-A2

<400> 2720

acgcgtcaac actatcgaca atggatgcga caacggcatc aacagtggat gcaaaatgaa 60  
gaagaagaat cgacagaaaa tcatcatggc aagccttggg aacgtcgaaa gacggcagat 120  
agtagtaata gtagtagtag taacaatagt agcactagtc aaaaagggtcc tagtacgagt 180  
gttttgggac atgttggtgc atccgatggc caagcaaaga aaagagggga ttgttgggtt 240  
gatgaagaag agacttggga agagaatact cataataata atgaagatga tgacgatgaa 300  
tggaagagt ctgaacaaca accagaagaa aagcgttt 338

<210> 2721

<211> 208

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-A3

<400> 2721

tcaaccacg cgttcgcaac actgttcgaa aaaaacactg cctattgcgt ttggcagttg 60  
ttctgtaaat ctctcattg agagtcgaaa gactcgttgt tgtagcatc ttcaacttgt 120  
gataacaat tgggaggaag tgcgcctaag ttttgcacg aaaataacat acaagtcctg 180  
gtcataatac gtgtgtagca agcgtttg 208

<210> 2722

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-053-Q1-E2-A6

<400> 2722

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aagacaaact ggagctatat gggtacttta aacaagccaa ggagggtgat tgctccaccg 120  
aaaaaccaa aggtcttttt aatcaaaaag aaaaagcaaa gtgggacgcc tggaattcca 180  
aaaaaggat ttccaaagaa gaagcacaga aaaagtatat cgaaaaggtc gatcaactat 240

gcggcacgca gtttcttcaa agcgtttcct agtcacctta ggtccttgct ctttttttgg 300  
 tttgtcggtc ctaattccca aaaaatatga gtaaagtacc cgtttttttc cgcaaaaaaa 360  
 aaaaataaaa cagaaaaaga aaccaatgta atctaaacaa taaaanaaan aatgaataag 420

<210> 2723  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-A7

<400> 2723

aggccacaac caaacttttg tattgttttt gattgtgatg gtgtacttgt aaactcggaa 60  
 ccttattctt gtgagtcctt tcgacaagct attcttcgag ctagtggcgt ggatatccca 120  
 cacgagtttc caaacgacta ttttgaagtg tttggcttat ctgtctattc ttccattgaa 180  
 tattatgtga aaaagggat tctacccgaa aacacagata tcgatgggtg ggctagaaaa 240  
 gtgaatgagt tgaaggatcc aatatatgaa gaattagcaa gaggaaagtt atcaactttt 300  
 cctggattga aggctcttct tgaggaagct tgtgcgaaaa aggttgctct aggtgttggt 360  
 tcttctggaa caccggagaa gattcgaatc aatctaaaac aagcaggcaa tccttcccaa 420  
 ttc 423

<210> 2724  
 <211> 364  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-A8

<400> 2724

agcccacgcy tccggtttga ttgggtgtg gaagcagttg tagacttttt catgatgtgg 60  
 tgggtggtctg ctgggtgcttt gagtgtgatg ataccgaaac ctactgcctt gtttcagcgg 120  
 agatatgggt ttgggtttgga agttagtatg attgcagcct ttacctgggt gaactttgggt 180  
 tttcacttta tcgaagtcta tttgtctatt ttgacgatat atgttggata gcgcaagcta 240  
 gtccatactg aagaagatga agacgctgac tatgagggcg ctgatgctca ttcgggttttg 300  
 tcggaaagga gtccctacaa gtctgtttgt gtgtgtgtgt ggtctcgaca tgtgggtggt 360

cttc

364

<210> 2725  
<211> 87  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E2-B11  
  
<400> 2725

cgctcatgcyg tccgctcaac gacgtactga gactcactca ttttctcttt gttttgtctt 60  
ttgtggctgt cctcctcgtc gctcacg 87

<210> 2726  
<211> 223  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-053-Q1-E2-B2  
  
<400> 2726

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cgtgaacaag tgacggaata tatcacacag aaagattaag aaatgggttag agtaciaaagc 120  
ataaggtagt aaaagcagga atctgatatg agganagcca cattggcact gacattatgc 180  
ccaaacatca cacgtcatca ctggggaaca ttgggcaatg tac 223

<210> 2727  
<211> 184  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-053-Q1-E2-B4  
  
<400> 2727

acgcgtcaac aaggactttg tactccttgt tacttgttgc ccggtgcaag ataagctcgt 60  
tgaaaagtac tggctccga gtatagaatc gtacgcggaa tagccggctc caacagcgga 120  
acacacaacc aaaatagttt attggcgtgt cttggaattt ggtcaaaaag gcctgtacgc 180  
gaca 184

<210> 2728  
 <211> 100  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E2-B6  
  
 <400> 2728  
  
 gtcaaccaac tcaccaagat gaacttgtaa tccatcactg gcagatcatc tttccgatct 60  
 aacgtccatt cttttcttat ccacaaacaa aactctcgga 100

<210> 2729  
 <211> 72  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E2-B8  
  
 <400> 2729  
  
 gacccaaacg tcagcccacg cgtctgaaga aactaacaaa aaaagaaaac cgaaacccaa 60  
 tcgcacaaac aa 72

<210> 2730  
 <211> 444  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E2-C10  
  
 <400> 2730  
  
 ggtcgagcac gcgtccaccc acacgtccgc ccacgcgtcc gccacgcgt ccggatgctc 60  
 attccaagag atcgtccaqa agcaaccaa cttcgagcca agagagcaac gaggaagatg 120  
 gtggagaaga tggattcaa agcaatactg tggagaccga ggtgttacct ccaggtgggtt 180  
 taggcaatgc taatctcgat gagttggctg aaaatgctgc aaagagtctc gtcataagta 240  
 ggacggaaag cgccaaacag tcccaagatg gaggcggtga agcggatgaa aacttggaat 300  
 ggtgtgcgga cacatcaaaa gaagcaatta aggcaaggca agcggaaagct gcagcagctg 360  
 caaaggtttt ggaaggtttg acggattcga agaagaagaa gaacgtcaat gttcctgtgg 420  
 agaatgacaa ggaagtggaa aaag 444



<210> 2731  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-053-Q1-E2-C12

<400> 2731  
  
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 agaaagaaaa gaaaggaaga cacagtaaatt gaggcgagaa agcatangaa gtgaaacgga 120  
 ttaggaaccc gtgtagtcta tgcagtaaaa gaaagaatga gtaagaaaaa agggagtcatt 180  
 tccaccaggg gagtaaaggc gcaagaaaga aacccaaagc aattgacggg aatcggaaaa 240  
 aggggtggat cacgtaaatt aatccgatat aaaccgagaa ccttacctct ccaagaaggt 300  
 gttgcacggc tgtcgaaaga acgtgctgtg aagtgagaga acgtacgaga aagccaagtg 360  
 aggaaaagaa ggcaagtaga gggcggcccg agaaagagga aagggatgaa atgcagagat 420  
 ctct 424

<210> 2732  
 <211> 354  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E2-C3

<400> 2732  
  
 acgcgtcagc ccaagcgtcc ggtgatcgcg acggagaaac gtatgccgtc cattcttatg 60  
 gaaagtcata ctttagaaga gatatttttt agttcggaaa ctacaggaat ggtgtagtcg 120  
 ggtatgggtc ctgattcaag agtattagtg agaaatgctc gaaagtttgc tcaaagttac 180  
 tatcatacct atcaagagcc catatcactc gttcaacttg tacgacaaac agcgttcggt 240  
 atgcgagaat tcaccaatc tgggtggcgta aggccttttg gtgtaaattt gttgatagct 300  
 ggttgccatt tttttggacc acacctgtat caggtcgata ctagtggaat ctcc 354

<210> 2733  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-C6

<400> 2733

gtgggttggtg gagtaagtgc gcttggcagc aaactaaaag atggcaagaa gaatcatcgg 60  
agcttatatg tctgacgcta ctgtagcgtc tctatttagc gtgaaaatgt tgttctacct 120  
tacaatactt gcgttctcta tcaactattgt gggctttatg ggtaagagtt ccgacggtat 180  
ttgggttcac agtggtccag cgaaagacga atattgtgca tacaagtctt cccttcaagt 240  
aaaccaccac ggcatagctt cctattgcaa gtatatcatg gctgtagcag ctattggttt 300  
ggttatcagc ttcttcgagt tttgggatgc attcctcgga attttcttca agtggcaaca 360  
aaagttgtgg tatattgaat ctgctatcaa cgtgtttttc tgggcttggt ggtt 414

<210> 2734

<211> 251

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-C7

<400> 2734

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gcaggtagga tcataccgta ttgatctatc acgtccatat tgtctcaagt tacctggaaa 120  
ctgttgttct accttacaat aattgcgggg tcgatcacta ttgtaggtca tatcgctacg 180  
acttccgacg gtatttgctg ttacactggt ccagcgattc gacgattatt ctgcatacaa 240  
ctcttcctt c 251

<210> 2735

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-C8

<400> 2735

cccacgcgtc cgcccacgcg tccgaaatat tcgtagaatg gaacaaatat tgttggagag 60  
tcaaaacaaa gcgcttgac aggtgaaaaa gggagccttg tctataaggt cgttgaacca 120  
cgtttccttt tctgtaccgc aaccagtga gacgggcaag ttcttttgcg agattcttgg 180

ctttcgagtg gtctgacgac ccaacttcaa ttttgacggt atatggttgt acagttatgg 240  
tattcaaata caccttatcg aaggtgctgc tctcgaaaga ccaaatatct tgaaacccaaa 300  
cacagaccat atatctttcg aagcggatga cctcacaagt atacagaata aattggacac 360  
tttaaattatt ccgtatcttt tggagtatca cgaacgggag aacttgagac agctgttc 418

<210> 2736  
<211> 345  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E2-D1  
<400> 2736

agcgacacgg ttttcttgtc ctctaagcgt ttgcctttgc atcgttgtgg gaagaagcac 60  
actagctttc ctatgctgca cttttcgata tttcgtcaac ctattagaac aaagatggga 120  
ctcaaggacc aagtgttgaa catgtttggc agaggatatg aacccaaaga cagagaacaa 180  
gccatcattc cttctgggga acattatgtg ttgaaaactc ccctagttgc caactttgaa 240  
gagatgggat ataaatatgc catgtttgga ctcggttgtt tctggggagc tgaacgtaag 300  
ttttggcaaa ccaaaggtgt ttattctaca gctgtcgggt atgct 345

<210> 2737  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E2-D5  
<400> 2737

agaaagaagc caattcgagg tgggaatacct ctgtgttttc cacagtttgg tccttatggt 60  
tccttagcac aacacggatt tgcacgcaac tctatgtggc acttgaaaca aataggtaca 120  
acgaaagatg gctcagccac tggagtcgtg ttgtctttat cttcaaaaga tgtggatgct 180  
gcatggacct ctgctgggcc ttacgctttt actgcccaat atcagttggt attagggttt 240  
caaggtctac aaaccaattt ctgggtacga aatgaaggag aggagtcctt ttctttcacg 300  
tttgcttttc acaactattt tgatgtatct gacgtctcta gttgtcaagt atttggattg 360  
gaaaatattc cctattatga tcgtcgaaag aatga 395

<210> 2738  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-D6

<400> 2738

gcaatatgcc tagtcataag gaacaaaata aaggaattaa aatatcagct gacgggttacg 60  
 cactaaagtt gagcgggtatt cgggttgacg tagacggcag tttgggtcact atgggtggacg 120  
 cagacgacct cagagccctc atgtttaagg aaagcctcaa ggaaaagtca aagctgcatg 180  
 acccaaaatt tttcaaaagc tattatgagg agaataagga ctacttttat tatatgactc 240  
 atacggagaa gaaaatgttt ctttctctgg aagttgcacg agaatacgt actctggtgg 300  
 gaaactcggt tctgcagaaa tatttgagca aagtcattga gcacgaacac gcatactaag 360  
 ggaaacaacg ttgttgctga tagtttgcg 389

<210> 2739  
 <211> 397  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-D7

<400> 2739

gcagettaca aatgtgagga agccacttcc gacattttgc gtgatattgc caaggaaacg 60  
 tccaaaatgt tgcgaagttt agaagaagga gaaaaaattt ccaacctcgg ttccaagttt 120  
 cgagacttgg ttcaccaatg tttgagtagg ttcgacagt cagtttctga tgtgaattcc 180  
 agtgcttttg tgtcacgaaa acgaagagaa cttgaagcaa tcattgacac ctcatataat 240  
 gctgtctttg tgaaacaact gcaggtttta cgtgagaatg ctttgtcgca gttcaaggct 300  
 tccttatctt cggaagaggt tccgagcgat tttgcgttct ttactgccga cagtatgttt 360  
 gttcgagaag cggaagactc cattcgctct ggaagtg 397

<210> 2740  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-E1

<400> 2740

agggaagaag aaggaaagaa tagtgagttt gtacaacaat ggccaatgat ccatcgttgt 60  
tttgcttgga agagagtaga ggaagtcatt caagcgtaa agaaagagac cgaagcaact 120  
gcagattcta caagcaagtt tgcacaacaa gccttggaac aaatattgaa aggttctcca 180  
acgagtctca aagtaacttt ggagtccttc gaacaagctt cacagatgac attgaaacaa 240  
accttacaaa aagatttccg tatgtcgatg cactttatga aaggtcacga cttttatgaa 300  
ggcattcgag caactttggt agataaggat agaaacccta aatggcaacc ggacaagttg 360  
gaacaagtaa ctagagcaac tgtagaagaa tac 393

<210> 2741

<211> 443

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-E11

<400> 2741

ggtcgacgcc cgcgtccacc cacacgtccg tggttgtgga acataagtgg atcaagaaag 60  
gatgacttat ggttttgttg gcgctagttc ttgttctgt ttggtttacc gcattcctcg 120  
caacttggtt aaatgcttct caacaaagga acataaaatt ttccgtcgcg ctaccacata 180  
cacgtgtaat actactatac tggcggtaga caagtcgtct tcttcaacta gtaatgttgg 240  
caagactgaa caaatcaagc cttttgaacc gaagaagagt gaagacgcaa attcctttca 300  
acagtccttt tctagcatgc cttcgatgca aaataactgg ttttcagatc cttcgaagtt 360  
caacgcaaaa gtacaagatg tagctcagga catactccat atacctactt tctatgcca 420  
gttgctagca gctactgttg gta 443

<210> 2742

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-E12

<400> 2742

cgtcaaggaa aaaaagtggg aatttagttg aaatcaatta ctctggaacg tttcacaaac 60  
 gttcagcaag agcaaacaat tatgtcagtt ttctgcatct tctgaaaggg caagaaatcc 120  
 acaacacttg cgcttttctc ggcatatgtc cttgagatat atctttcggc ctgtgtctcc 180  
 actttaccaaa agcattcaga ggccgactcc ttggagatgt ttcctatgta atttatgcat 240  
 agtaggtact aaaaaggatt tgtcagtact atgttgatga aaataaggaa aagagtctgt 300  
 ctccctgttc agagctattg tgtttggcgt gcaggaactg tcgaaagctt catgataata 360  
 tgtgtttttg tgtccaaaac aatggagctg cctttggata gcagaaatgc aagtgtctgt 420  
 gccgtttg 428

<210> 2743  
 <211> 274  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-053-Q1-E2-E3  
 <400> 2743

agagagaaag aggaaagga tgaaatgcag agatctctag agaaaggcaa gaaagaaaag 60  
 aaaggaagac acagtaaatg aggcgagaaa gcatangaag tgaaacggat tangaacccg 120  
 tgtagtctat gcagtaaaag agagaatgag taagaaaaaa gggagtcatt ccaccagggg 180  
 agtaaangcg caagaaagaa accanagcaa ttgacgggaa tcggaaaaag gggatgatca 240  
 cgtaaattaa tccgataaac cgaaaacctt acct 274

<210> 2744  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E2-E5  
 <400> 2744

agttgggttg tccactggtc atggaggaag aagcgttatt caagtaagca ggttgtcttg 60  
 tggttgtgat atcacagaga atttctagtt atgtgaatca acattcggaa gaatatatac 120  
 accgtttgag ggaagccgtt gctctggatt cagttagttc ggatcccaat aaacgctcgc 180  
 gttgcttgga tatggccaac tatatttgca aatggatcga aaaattggga ggaaagccta 240

ttgtaaagca tataggcaaa caaacgtttc ctgatggcca agttttggac tatectccca 300  
 tcctatttgg agactttact gtggacacca aggagaaacc agtgctcttg gcctattgtc 360  
 attacgacgt caaacctgca gatatccaag a 391

<210> 2745  
 <211> 374  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E2-E7  
 <400> 2745

agggttgggt tgtccactgg tcatggagga agaagcgta ttcaagtaag caggttgtct 60  
 tgtggttgtg atatcacaga gaatttctag ttatgtgaat caacattcgg aagaatatat 120  
 acaccgtttg agggaagccg ttgctctgga ttcagttagt tcggatccca ataaacgctc 180  
 gcgttgcttg gatatggcca actatatttg caaatggatc gaaaaattgg gaggaaagcc 240  
 tattgtaaag catataggca aacaaacgtt tcctgatggc caagttttgg actatcctcc 300  
 catectattt ggagacttta ctgtggacaa caaggagaaa ccagtgtctt tggcctattg 360  
 tcattacgac gtcc 374

<210> 2746  
 <211> 337  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E2-F10  
 <400> 2746

ggtcgacgcc cgcgtccacc cacacgtccg gggtgagatt ggttttcttt tcgtccacgc 60  
 ttcgttccgt tactttttgt cgtgacaagt tataatataa aatggccaaa gtaaaccctg 120  
 tgtcgtcggc tcctaaacta agtgtaacta gagagatagc tatcgggtatt gggcttggtta 180  
 tagcgtgtgc tatggtatatt cgccagtggc atctcggata cacggaaatg ataagaaaat 240  
 attatcgcga gttggatgag caagaacaga gttcctcgtc gtcgtgaaaa ccgccttgtg 300  
 tttgtgagat agcaataaag tggactcttg tttccat 337

<210> 2747  
 <211> 267  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E2-F3  
  
 <400> 2747  
  
 aggttatgat agaaaagatg gaagtaatac acatggtaag tggactaata ctgaatcata 60  
 tgacagaagg aatggagaat ataaggaagg attacatgaa ggaggagatt atacgagaaa 120  
 tgataaggtc gatatatata tcgataataa gtgtgatagt tatataaagg aggacaaaga 180  
 gacgaaagag gtgtacgatg caagctaaga agtgaccac tagatcagag agtaacacat 240  
 gcaagtacgt acagcgaacg ggtgagt 267

<210> 2748  
 <211> 129  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-053-Q1-E2-F7  
  
 <400> 2748  
  
 ttgcatcgtc tgctctgagt tgctctttc gctctttcct tatcgctgcc gcagttgcca 60  
 gcgccgctgt ttcagaggag agatggggat atgcgcagca gggccagcac cagcaacagt 120  
 gccacaag 129

<210> 2749  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-053-Q1-E2-G12  
  
 <400> 2749  
  
 gcgtccacat ctacagagag tagcaatacg aaccgacaac ctttcctcgg cttgccttct 60  
 tctcagtcgg ttccaggctt tccatattta agatcttttt tgattggtat tgttgctatt 120  
 ctggtgacct cttttctctc ctggaagcac gcaaaaacag tccacaagga tgctccgtta 180  
 ttgacaagct cttattgcag aagcttctct gggcctagct ttccttctgt attgcgttct 240



acaagagtag tgacggataa aggtatttat attgtcttgt ttgcttgtct aagttttcgt 300  
 cgtaggaac ttttcccgct tccatatttg tcgatagcgc tggtttcac tcgagagtag 360  
 ttcttggtt ggttgaagac tcgacttggg gttgtcttca tgatgtanga aatctggtcg 420  
 ttatgcctgg a 431

<210> 2750  
 <211> 304  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E2-G6  
 <400> 2750

gcgtcagcgg acgcgtgggc ggacgcgtgg gcggacgcgt gggcgaggat cgaatgcaga 60  
 cgctgtagtt ttgtgattgt ttcgtgtttt gtcaagcttg tctcagtaat aaaaagtgac 120  
 attttttagtt gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggaggagc cgcccaaaag 240  
 gttaaaaaac ttacgtatca cgtgcatgaa atttcaaac ttttttaaag ggtaaaacaa 300  
 ttcc 304

<210> 2751  
 <211> 139  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E2-G7  
 <400> 2751

accaagcgt ccgcccacgc gtccgatgga ggtaaactgg tgttgggttg gaggatcgag 60  
 tgcagaagct gtagttttgt gattgtttcg tgttttgtca tgcttgtctc agtgggggaaa 120  
 ggtgatattt gtagttgag 139

<210> 2752  
 <211> 69  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-053-Q1-E2-G8

<400> 2752  
ccacgcgtca gcccacgcgt cgggactagt tctgtattga ttggctctac gtctgccaat 60  
agtttttgggt 69

<210> 2753  
<211> 235  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-H1

<400> 2753  
ggctctagaat tacggggccga gcacgcgtca gggagaatgg aagaggagga ggacgctgcg 60  
tattattcac aaatagataa ggaagtagtc gagtctatgg aagtttccga gagtgtttct 120  
gggtttcctg cagagacgga gaagccttat agaataccaa actttacacc attgactcaa 180  
gacgactttg acgaagactt gtgggttttcc atggaataaa agtatagttt tttgt 235

<210> 2754  
<211> 326  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-H11

<400> 2754  
ggccgacgcc cgcgtccagg caagaaacac gcaaatactg gaaagcagtc atcgatgatc 60  
gagaacggaa caaactgact atcacgaaga aaagatggag tagatcagga ccgaaagctc 120  
acggaagtca gagtaagcgc aggagtcatc ttaatgaaag caggaaagtc attgctcaag 180  
agagtgtaca cctcgtcact tttgcaaaat ctcaaacga gtgaaagagg aagccagaag 240  
attgcatcac cagtagccag gtaacacccg aagctacttg atcatatgct gtccatgcga 300  
actactgctg aatcaatacc tgtgga 326

<210> 2755  
<211> 276  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-H2

<400> 2755

acgcgtcagc ccaagcgtcc gggaaaacaa cgtggaaact atcgacagaa ccaacttaag 60

tgtacctcca atagtgtctg aacgtatggg aaagcgtatg ttgtatgctg ccagtgttcc 120

tctcaccttt tttgttctcc tttttggttc cctattcgtg gcaaagtttc agtttgatat 180

tacttttatg ccatcggtag tagcgtatag ttcgttggtg cttatttttt gtaccatggc 240

agcactgagt tatggtattt tttccgcctc gtggga 276

<210> 2756

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-053-Q1-E2-H3

<400> 2756

cccacgcgtc cggggcaacc aactaccacc aaaagtagca actgcaagga ataacagagt 60

gtcctaaaga atagcaagtt gtgatgagga gaattggtag caaactcttg tcttattccg 120

gcaatgaagt aaaacttcgg gatgttggtt cttctctaag ggagacgagt aaagcgacgg 180

ggtcttccat ccggagttgg cttcgtgata tcaaccagtg gtatgaagac acttactata 240

aaaagggaaa ggtggatcct ttggtacatt atatgttact ttgttttgga ctgggatata 300

ccatcaatta ctcccatatc aaacataaag tggagcataa gaatgacgat attgaaagct 360

tgtaaaggtc accttgttgt gttgtggtga tggctgacgc atagttggtg atatagga 418

<210> 2757

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-053-Q1-E2-H4

<400> 2757

cattgttgat gagaccgagg ttaataggga catgaagaca aggaaacctg ttctctttcg 60

gggtccagat ggtcgcttac atcgacagagc ttttatcgga ccgaaaaagc cacatactca 120

aataacaatt agagagattg acattggaac tttaaagcat agttcgagcg acccaaattct 180

atccgttagg agaaaaaagg cggtagaaaa cttcaataag caagtgatgc gcggcgatat 240

cgatgaatgg agtttgagga acctcgctta cactaccgat gatattcaag gctatgagtc 300  
agattctgac gaggcacccg antattcaag taatgtcaat cagcactctc attcttatgc 360  
aactgcgtcc aacagt 376

<210> 2758  
<211> 95  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E2-H6  
<400> 2758

gaccaagcgt cagccacacag tttcaaaactg tgttggtatg acgatgccat tttgcattgt 60  
acttgctacg acttttaagt tttcacaaat tcctt 95

<210> 2759  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E2-H7  
<400> 2759

gaccacacaga cgtcagcggg cgcgtgggct aagctattac ttgtacaaga ggaacgtaat 60  
ggattgacca agtgtgagaa gcaaagtcaa tggaacagga agaggaaagg cgaacacagt 120  
agcgaataaa tctatagtag aaagcagtaa ggaaatgagt actgtgcatg aggacaggaa 180  
agtatttgaa gaatagagtg taaagcgcgt agcttttgca taatgtcca tcgagtgaaa 240  
gaagatgcaa taagaaagaa aaagaagtat ccatttaaga cccgaagcta gttgatctta 300  
tgctgtcgaa gcgacataag gctgaccacag tatctgtgga aaatgattta gaagagatgg 360  
cataaggggt gacatgccaa tgacagctag tgatatctgg gacaccgcta aagc 414

<210> 2760  
<211> 365  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-053-Q1-E2-H8  
<400> 2760

agcggacgcg tgggctgacc catgggctgt acgataggta gatcagggat cgatcacggg 60  
 tgcaaaacgc cctcaaaggc gcaggcactt gaaaagcgag aaaagtagcg aagaaatcta 120  
 aaatagcaag gagtaagaga aggactaatg taaatgaacg caggatacta tttgagtaat 180  
 acagtgtaaa ccgcatacct tttgcataat gtcccagcga gtgaaagacg acgcaaaatc 240  
 aactaatgga atgtggccag gtacgcctag actcccgatg atattcaacg gtacgagtca 300  
 gattctgact aagcatccga taattcaagt aatgtcaatc agcactctca ttcttatgca 360  
 actgc 365

<210> 2761  
 <211> 373  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-A1

<400> 2761  
 cggaaaaagg ggtggatcac gtaaattaat ccgatataaa ccgagaacct tacctctcca 60  
 agaaggtgtt gcacggctgt cgaaagaacg tgctgtgaag tgagagaacg tacgagaaag 120  
 ccaagtgagg aaaagaaggc aagtagaggg cggcccgaga aaggagaggg cgtaagacgt 180  
 gatacagagt aggaagaaaa gagaagagag ctagaaagga ggtaaaagaa gagtaaaagg 240  
 actagaagag gtacggaatt cacgaggaag gagcgtgaag gaaggaggaa tccaagtaa 300  
 tcgaggaaga aaaagcttcg gtgaaagcgt gaacggattt tgtacacact gcccgtaag 360  
 ttctggaagt gtg 373

<210> 2762  
 <211> 332  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-A3

<400> 2762  
 gcacgcgtcc gagggcgtaa gacgtgatac agagtacgaa gaacagacaa gatagctaca 60  
 aaggaaagtac aagaagacta taacgactag aagacgtacc gaattcacga cgaaggaccg 120  
 tgaaggaagg aggaatccca agtaatcgag gaagaaaaag cttcggtgaa agcgtgaacg 180

gattttgtac acactgcccc tcaagttctg gaagtgtgct aagaataagc aggagaagta 240  
 taagagagta tgaaaagaag aaaggaagtg aagacgtaag acgtgaaaaa aaagcgtaag 300  
 acgtgatata gagtaggaag aaaagagaag ag 332

<210> 2763  
 <211> 361  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-A8  
 <400> 2763

gcgccgtcgt ggtgtttttc gattcttgtc ggcagtgttg ggtgagaata gtaaaacatg 60  
 acgagatatt ccaaggaacc agataacccg acgaaaactt gcaaagctcg tgcttcggat 120  
 attcgcgtgc actttaaaaa cacgcgagag acgggacgtg ctttgaaagg aatgagctta 180  
 cagagagcaa aaacttattt gaaaaacgtg atagagaaaa aagagattgt accctttgta 240  
 cgctatcgtt atggtgttgg tagaaaagca caagccaaac aacacggttt tcccaacgga 300  
 agatggccga agaagagtgc gttggtattt ttggacttgt tgaagaacgc agagtccaat 360  
 g 361

<210> 2764  
 <211> 364  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-B11  
 <400> 2764

cgaaaggagt agaagaaaag agagagaaga aagaaaagaa gagaaaagcc gtactgaaga 60  
 ccgacacagg tactcgagga gaaaggagac ccaaattaag gtgagagaat ggacgataag 120  
 gaactaggca aaaggatatg gtatctgcgg tagaacatat gaaagaagca gcaccgactg 180  
 tttagcaaaa acacagcact ctgcagaaaa gaggtgtatg atgcaggcaa agaagtgcg 240  
 cagtagatca gagagtaaca catgcaagta ggtaaagcga acgggtgagt aaagaggtgt 300  
 gaaagagtgg aagaacatga aagcacagaa gaatgtaaga aatggttaga gtaaaaacca 360  
 taaa 364

<210> 2765  
 <211> 384  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-054-Q1-E1-B12

<400> 2765  
  
 agacgaaaag caaattcccg cgctattcg ttcagaaaca actttagaag atgaacttgt 60  
 cttagatgca ccagcacaaa agacattaaa cttatataaa gtagataatt atacttttgg 120  
 cacgaagcag tcatcccaaa aacaacacga aagaaatcca cagcgtttaa aggaaaaata 180  
 tcaagaaagg ggtttgaggc actctgttgc aggagtactt cttgtacatc accatcgaca 240  
 tccgcacgtt cttgtattac aacaaaccaa ggactctgga agtttttggc ttcatgntgg 300  
 gcgtttggcg tccaagtga ggtgactttg gagggttatc gaggaaactt agatatcgct 360  
 taaggagtcn ctcacaagag aagg 384

<210> 2766  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-B2

<400> 2766  
  
 agcgacaaca accatcagaa caaagtttgg ttggttccgc accgttatta cctcatcgac 60  
 cagaacagca gtatgtgaaa aacacagggg aaccaagaag aagagtttgc aaggaatcaa 120  
 cggaagagaa acatccaacg agacacaagt tgaatcatgc aaaaccacga gataaggaga 180  
 ttttggaaga agaggaaatc ttcaatttac tagaagcttt tagaaagtat tttccagaac 240  
 caccgagcaa tttgagagct caagaaataa ttgaagtagg tatttgcac ccttggcttt 300  
 tgaataattc acaggagaaa gagtaggtct ggtaggttct ttacggagaa agaacagtgg 360  
 gagctgtggg aaaacgtttt g 381

<210> 2767  
 <211> 360  
 <212> DNA

<213>      Cyanidium caldarium

<223>      unsure at all n locations

<223>      Clone ID: LIB190-054-Q1-E1-B3

<400>      2767

cccacgcgtc cggataaata tggaatcctg gaaggtttga tgacgaccgt tcatgcaact    60

actgccaccc aaaagacagt agatggacct tctcacaagg attggagagg aggaagagga    120

attttgaata acattattcc atcttctact ggagcagcca aggctgttgg taaagttatt    180

cctgaactga atggcaagtt gacgggtatg gctttccgtg ttccttgtcc ggatgtttct    240

gtcgtcgatg tcacttttctg tttaaagacn acaaccactt atgacgattt caaggcaacg    300

atgaaagctg cgtcagaaag caaagcttta aagggaatat tggcatatac cgaagatatg    360

<210>      2768

<211>      346

<212>      DNA

<213>      Cyanidium caldarium

<223>      Clone ID: LIB190-054-Q1-E1-B4

<400>      2768

caacatcatc aaatgccaaa gggaggaaag aaagattctt caaagaaaga agccacaagt    60

aaacctgcag cagcagatgc taaaagacg acagaaaagt ctggtccgga agccaagttg    120

aagggaactg gtgcaaagaa acaatacaaa gttgactatg catgtgcagt cctgttatgt    180

tttgtgagtt ctgtttgata gtttccagct attcttttgg tagtgaataa agagaaaatt    240

ttttatatatt aaaaaatttc gtttaaagac acaaccactt tatgacgatt tcaaggcaac    300

caaggaaagc tgcctcaaag atcaaagctt taataggaat attggc                      346

<210>      2769

<211>      377

<212>      DNA

<213>      Cyanidium caldarium

<223>      Clone ID: LIB190-054-Q1-E1-B5

<400>      2769

gaaataataa aagagagaga gcaacgacga caaagaaaat gaggttattt caacgttgga    60

aaagaattgg caactatttc atctactcgc aatactctag tcgaccgaat agtttatttc    120



aagcagaccc taggaaatat aatatatatt tacagcatcg agtggagaaa cacctagtgtg 180  
cccattctat ggttcgagca tccctacata atcctcgctg tcttacaagt tcttcatcag 240  
aacaacaaca ttggaaccaa gtacacaaaa caacaacaac accaagtgtg gataatcatc 300  
ctagtcgtga agaagaaaag agtttgggtac tcgttcctgg tcaagagaca aaagaagaac 360  
aaggagccaa gcgacag 377

<210> 2770  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E1-B6  
<400> 2770

atcggtgttg agatatgcaa acttccctcg cattctcttg ttggacaccg ttgcagcgaa 60  
cttcaaagaa cgtagtttgc tcgtctagtt tttgcaaaaa tagctctatt ccgttccatg 120  
ctaccaacag aaggagttgt gtttttccgc tgtctttttt tggagcgcct gtcgttagtt 180  
ataagtggga agtggctgca aacctgcagc gaaggcagtt tggttcagtt tccatggagg 240  
tacgtgttga cgtacgtgaa ggtgaacctt tcgattctgc tatagcaagg tttcggagag 300  
aagttagcaa aagtggtcac ttgtttgagc tgaaaagacg acaagagttt gaacctata 360  
gtgtgaagcg acaaagatca aggaacaag ctcta 395

<210> 2771  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E1-B8  
<400> 2771

cggacgcgtg ggcggacgcg tgggttttcc caacagaaaa tatacacaaa cagtataat 60  
ctagaagaat acaatcaact tgagaaaaaa attcaagtaa tcacaacttg catctctatc 120  
tcatatcatc tttctatcat ggaccaagtc gatgcattct atgcattggt gttgtgttgc 180  
ttcctagaaa aacttgttga gagtgctatg aactgtttgc caataaagac gacaacggag 240  
gtgcaatgcc catttattgg ttggagatcc aagcgtcgtg ttctgccaac gtacaaagga 300

taagcgtcca tagcaactat atatggcact tgcagctaca atgtatgcaa tgtagtgaaa 360  
aaacgggggtg gattgc 376

<210> 2772  
<211> 340  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-B9

<400> 2772

tgatgagctg ttccaacggc aaaagagaaa cgagctctag tgcaacactg aatgaccttt 60  
aaggcttgat ttttccgatt atcatactaa acgctgattt tacacacaac tcacgagaaa 120  
ttgatattag agtcgacgag aaagaaacat attgagaact gatgttaatc tgtctagctg 180  
ttggcaataa gacaagctac ggcgtctttc caagtttctt tcaactctta taaacaaaac 240  
aagtaaaacg cctattcact actggtaaag tcttttcttt cgataaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa .ggaaaaaggg 340

<210> 2773  
<211> 399  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-C2

<400> 2773

cccacgcgtc cgcccacgcg tccgcccacg cgtccgcgat gcggagtgga acataattta 60  
cgacaagttg gaaaaaatcg tcgctacagg tgccaaagtt gtacttagta agttggccat 120  
cggagattta gctacgcagt attttgccga tcgagacata ttttgtgctg gtagatttcc 180  
agaagaagac atgaaacgtg tcatgaaagc caccggtgca agcatgcagt ctacagtga 240  
taagctaact gatgatgttc tcggtacttg cgcattgttt gaagagaagc aagttggtaa 300  
tgaacgttac aactttttca ctggttgctc atatgctaga acagcgacat ttattattcg 360  
aggtggttcg gagcagttta tggatgaaac ggaacgttc 399

<210> 2774  
<211> 137

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-C3  
 <400> 2774  
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 cgtttccaca agtcccgtag atgtattcag gaagttgggt ataggagctt aaggatcgca 120  
 ttcctttgcc gatggaa 137

<210> 2775  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-C6  
 <400> 2775  
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 taaagcgaac ggggtgagtaa agaggtgtga aagagtggaa gaacatgaaa gcacagaaga 120  
 atgtaagaaa tggtttagagt aaaaaccata aaggaagtaa aagcgggaat ctgagaggag 180  
 gaaagccaca ttggaactga gaaaagggtcc aaacaaggga agtaaagcct aagaaagagt 240  
 aaattaggca agcaaaggca tgagagaagt ataatagcag aagcatgctt gaagaaaaag 300  
 aaagagattt cagaaaggga agaaaagtca gctatagaga acaggtgaag gagaactcaa 360  
 aaagaggaga gcaccgaacg atcgaagaag aaactttggg ggtaac 406

<210> 2776  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-C7  
 <400> 2776  
 cccacgcgtc cgcaagaaca gtgggtgctt tgtaccatgt ctttctgtcc ttacaagtga 60  
 ataggttcct atggttatct ggactcattc tggcagttgt aactattctt caaaccttag 120  
 ttatgtatag aagctcaact atagaacaga aggtgtcctc taaacaaaag tcttcaaaga 180  
 aagaccccg aaaagaacaa ggagtttcag gttgtcctt gacgtgggtc caataaaagc 240

agtcattcaa ctacgccatt cggttcacag ctatggtttc cttcttcac tttgaactga 300  
 tcacatacaa ccggtagaag cgatgggagt cgagacaagc tagaaaaagg aactcgcaac 360  
 aagtcaaagc cacaataag ttgttaaccg aataactgtc caatacgggt t 411

<210> 2777  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-054-Q1-E1-C8  
 <400> 2777

cgccctccat atttcacttt acagacccaa aggagacctg gtatggcctc atcttgccac 60  
 ttcccaaaag gcgttttcca gagtctgcc aagtaagtttc aagtgcgtta tgggtgagag 120  
 cgttcatcct ccaaagtctc tttatataat acttattgtt gtttgaaaat aaactactct 180  
 cgagtggcag taacttgat acttgctgca accatgtttt ccaccctacc tctgggtctc 240  
 tgttttgata atactgcgtg gttttgctat gctgaaggga tagaacgtga tttaggcaaa 300  
 gttggcggtg gtgcagcaag ctcggggaaa acctctactg gtgtatctcg gactgtaact 360  
 agaggagtga acctaagtgg agcagatttt tcgggacagg accttantgg tgtcagttt 419

<210> 2778  
 <211> 359  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-C9  
 <400> 2778

gccaatcaaa gctagtata gctggtactc ctcgaaagct atataagtag cgtatgcagg 60  
 aaagaagaag gtaaaggaag agaaggaaga agcagagagg gactatgagc gagaaggagg 120  
 atagtcgaga gggaaaaagc ccagaagcca agataaggta tcaaagtaaa gaaagaagga 180  
 aaaggagaag aagagagggt aggcttagaa gcagcaaacc agagaggaaa gcgttaaagc 240  
 atgaaagaaa agaaatccga aaaagaagag aaaaaggtaa gaaagaggac cgaatcaggg 300  
 taagaggtag aggagcaaga agagaagaga gaatgctggg tggagtatcg aaacaagag 359

<210> 2779  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-D10  
  
 <400> 2779

atcaattgtg tgttacctcg agaaacgtat atccacaatt ccttttctac tctccaagga 60  
 gtgtaccaag aaaaaccgta aagaagacaa ctcaactcaa ttctgccaaa cgaacgagtc 120  
 ctttctgcag taactttgaa gaatctgaag ctctgtgact gcgcacggtc acgagacttg 180  
 tatgaaaagt actagctcaa ggttactact ggaacaaaac aatactgcaa ttcacttggt 240  
 cgatccattg cttgcaagca acttacgagt caaacagcga ctcgaagagg caccaacggt 300  
 actattcttg caagaataga tatcgcttag tgcaacaaca taagtatata ttggtatatt 360  
 tgcaatttta gttcgtcaaa agatgctat 389

<210> 2780  
 <211> 378  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-D5  
  
 <400> 2780

cccacgcgtc cgcccacgcg tccgggtgtc cactcgtcga ggaagagcta taaggtttca 60  
 agtggatgac gagaatttac gtgcaactag cagacttagt gtcgggtgtac aagcaatttt 120  
 tttgcaacct ggtgattgcc tagccgatgt ggatgtcatt ccatcgtcat ggctccaaaa 180  
 gggatcctcg gagttgtatt tcttggcagt tggcaaatat ggaaaaggaa agagaataag 240  
 agcattagat attccggaac gaaaacgata tcaagtagga gtttatgtga tgaagtttga 300  
 tcggaagaag gaaccgaaag aagagcttcg atttttccgt gcgtgtcgaa gcgatgaagt 360  
 tgtgttgtgc accaacac 378

<210> 2781  
 <211> 334  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-D7

<400> 2781

gttggaattg agaggagggg cgacgagctc agcttgaaga ataattaact tgcgtggggg 60  
tggacgttat ttatgaactt ggactctatt gacagatgaa ttaatgcgcc ttttgacccg 120  
tttgacagcg cctcacgtgg atatgacgca acagtatgca aagatatagt gcatattcgc 180  
ttgcaagata gatacggacg caagtgcatt acgacgattc atgggcttga cacataattg 240  
gatttgaata gtattacata ggccttcaaa gaggagtttt gttgcaacgg ttgtgtcgta 300  
tacgacgcac atctgggaag agtcagccat ctgc 334

<210> 2782

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-054-Q1-E1-D8

<400> 2782

caaaagtgcg agcaagtaag actcgatatt actagaatga agcgtacgtt gcagttcacg 60  
ttgaccaagc tccaagatct gaaagcagcc tcattcaaca gagatactac gcacagagag 120  
aaccggaagc aagtgaacgg agttgacgaa gaaatggaac ctcaagaatg gctccactgg 180  
atagagacaa aggcagattc gtcaacactc gcatcattga aaagccaggt acaaacgata 240  
tcaaaagacc agcaatggac ttttctgtcc tcncttttag agaaagccta ttcaaccgtc 300  
aacagcgaag atttatcaac cgaatcctgc tcagtgaac agcttattca aaagaaagac 360  
gaagaaatag cttttttgcg gcaacgacta gccg 394

<210> 2783

<211> 353

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-D9

<400> 2783

cccacgcgtc cgccacgcg tccgggacct cctctttcca aaaattatct ctaccacgtg 60  
aaccgcaata cgaatagtga aggagaacat aaaaaacgtg caagatgtat acaagaacaa 120

ccgcaagttg ttttcgatcc tagcagcccg atggaagaac aagcagcgac atcaccacaa 180  
 gatgaaagtc cggctccgag cagcagtaat cctagtagtg catcttgga tgtattgtct 240  
 ttaccagcag aaaaatggaa agagaaagca ttggatgcag agaaacgtgc tcagagaaca 300  
 agacaagttg ccaaagcaaa gattaacgag tttcgtgaaa catgttatca ttt 353

<210> 2784  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E1-E10  
 <400> 2784

aggatccatc taaagtccaa cctatggcta agatttgacg ggaaggagtt tatgccgcca 60  
 cgtcccaaaa tcgaatttag ctgttgata aaattcggaa caaactatcc tcgattagat 120  
 tacgcctacg tagatatgac tgacgacggt aattggatgt tgtacctcat tcaagtttct 180  
 gtttcatctt ttccagctca tagcatagac ttagcacagt tggaacggtt gttcaagaaa 240  
 actgatggaa ctgttcaact tgcttcgttg ctaaattcgt tctttgctga ggttttagaa 300  
 gtctcgctg tgtatgatgc cagggagaag atagtgaact tcgaggtaac agactctcaa 360  
 ggcatatctt ttcgagacag aatatctatt ttgtatgtga ct 402

<210> 2785  
 <211> 290  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-054-Q1-E1-E11  
 <400> 2785

agatacaatt gacggaaaca ttactacca aaaatattct ttctgcagcc attagtattc 60  
 ctctttgtga caaggaatgt aataataatg acgagaataa caattagagg ttatcccaag 120  
 tttccgttct cttttcttcc tctttcattt gttccttgat tctttccaca attagattgg 180  
 aaggggctaa gaaatagaaa atagtttcta ttccattctt cagtcgagaa ttgggaatat 240  
 gtggttctat accgatataa agatgaccaa gaatggataa gaacanaana 290

<210> 2786  
 <211> 262  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-E12  
  
 <400> 2786  
  
 aggctctagg tccaaccctt gggttggttc ctccaaaatt taaccaaccc aattaactta 60  
 tccccggaag ttgccaacccg aagttacaaa ctttacaggc aactttatta ctacatacgc 120  
 attcaaacat atgaccaatg caatgacgaa tacaggtacc cttgttggtt tccaaggagg 180  
 tcctactaat ctcggttgga tgtatctcaa gttctttatg ccacagaccc aagacaagac 240  
 tctcgaaaaa atgtgtgaaa ta 262

<210> 2787  
 <211> 295  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-E7  
  
 <400> 2787  
  
 cccacgcgtc cgagtttggg tgttttcttg gtagcagttg tacattcaac atcatcaaatt 60  
 gccaaaggga ggaaagaaag attcttcaaa gaaagaagcc acaagtaaac ctgcagcagc 120  
 agatgctaca aagacgacag aaaagtctgg tccggaagcc aagttgaagg gaactggtgc 180  
 aaagaaacaa taaaaagttg actatgcatg tgcagtcctg ttatgttttg tgagttctgt 240  
 ttgatagttt ccagctattc ttttggtagt gaataaagag aaaatttttt ataag 295

<210> 2788  
 <211> 373  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-E9  
  
 <400> 2788  
  
 agtttgggat gtttggcata agaaagctcc catgcagaat tatctcttac acaacacaaa 60  
 attctgttcc gagtttggaa tgcaatcgct ttgttcggtg gagacatgtc gtttattcgc 120



accggaatca gaaatgaata tgtttaattc catatttgaa agtcacccaaa agaacagagc 180  
aggcaacgaa atcatgttgc attatatttt tcagttgttc caatttcctc gtcatacaa 240  
aagtttatcc tatctttcac agctgaatca agctctatgt atgaaatgtg gcgtcgaaca 300  
ctttcgtaga caaatgccgt tttgcatggg ctctctttac tggcagctga atgattgttg 360  
gccagtgact agt 373

<210> 2789  
<211> 393  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-F1

<400> 2789

aaagtattcc ggtggaatga ggaggcgggt aagcgttgcc gtttcgctta ttggatttcc 60  
ttcggttgtg ttattggacg agccttcac aggactagat ccagactcca aacacaagct 120  
gtggcaatgt atccaacaga gaaaagaggg caaaactatt gttttaacga cacactccat 180  
ggaagaagcc gaaagactgt gtgatcgta cggattatg gccagtggaa gtttgaaatg 240  
tgttggctct ccagaggaac tgaagattcg tcttgaaaa ggcttcctgc tgaatatttc 300  
ttgtccaaga agacgcgta aacaagttct ttcgtttata gaacaacagt atgcagatgc 360  
atttttggac cattccttaa cgggtagtgt tgt 393

<210> 2790  
<211> 391  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-F11

<400> 2790

agcccacgcg tccgccacg cgtccgccca cgcgtccgcc cacgcgtccg cccacgcgtc 60  
cggccatttt tcttgtggaa agcgttcgat agaaaaatgc caagagttgt tttggcgcct 120  
tgtaataact cgttggtaca tatataaatt atgaataaag aaaatctcca aatagcgcaa 180  
tttgagagac tcacaacaga gcaaatgctt aatctggtga aagaaccttc taggggtttg 240  
tactacacag tcgaacactt gaggaaacga gggatacctc gtctgggttc cgaacaagag 300

aaactcgaca cagttattag taaggaggac gacctcaaga tagactgtca gtttgtacag 360  
gagacgatgg aaatgtttcc tgcagctgca g 391

<210> 2791  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-054-Q1-E1-F6  
  
<400> 2791

agccccacgcg tccgagaggg gattggtggg tcacgaacga gaggatgttg ttcttttcgt 60  
ttttcaaaac gtttatcggc aaaacagtta cagtagaact caaaaacgat gtaattattc 120  
gaggcaaagt acattcagtg gatcaatatc taaatatcaa gttggaagat atagaaatac 180  
tcaatataga aagttgccca cagttgatga ctttgaaaaa ttcttttatt cgtggtagtg 240  
ttattaggta tattcaagta tacgctatcg acgtcgactg cgagatgcta caggaagcag 300  
ccagaagaga atacaaggag ttgaagaaag tagccaaata gggcgcaaga cacacgtgac 360  
cattgtctat ctatccacgg cgtgatgaac caactgcaac ttttgt 406

<210> 2792  
<211> 390  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-054-Q1-E1-F7  
  
<400> 2792

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agagattgca agaagataat atttaataga gcactatcac aaccaggaga tgtattttctg 120  
tgcttttgca acatccagtt gttggtgaat gcagaaagag ctattatagg aaatattact 180  
tgtccagaaa gtatcgaatt gtgtcgtcta ttagctggac atatagcggg ttggttcgat 240  
gaacatttgg atgactttcg tttggaagct atcttgggag cactattgtg tacttggtat 300  
tgtgagtgga agcgttttga aggagaattg ggggtacaag aatggaatga attggagaag 360  
atatcttcct tagatacttg gaagcttgtg 390

<210> 2793

<211> 140  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-F8  
  
 <400> 2793  
  
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 cttgtgcaag tcaacaaaca tatactattc gagagattgc acgatgacaa tatttactag 120  
 agcagtatca caccagggg 140

<210> 2794  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-F9  
  
 <400> 2794  
  
 cccacgcgtc cgcggaacgc tgggtccttt tcgtacattt tggattgtgg cacacaacat 60  
 gaaaattcct gtccgactcg tcaagttttc tttggaaaaa aagaagccaa cttgtttcaa 120  
 cagaagtata agtgggaatcg cctacacttt ttctcgccat ggacagggtt ctgatgtctt 180  
 gaaaaaggag actcaaagct atgatgagaa gaaacttggc ctttcgcaag tactcgtgtc 240  
 gtttcttgcc tcaagtatag gcacaacaga tttggcgtgg ataagaggta tgggaaagat 300  
 aacagaagaa ggatccaagt tgcctttggc tgccggttta gaaggtgtgg cagaagtagt 360  
 agcaactggc aatcaagtca agtccgtggg tgttggagaa cgcggtgttac ctt 413

<210> 2795  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-G1  
  
 <400> 2795  
  
 ctcaagcaga actgcttctc agttagttac gcaatatgcc tagtcataag gaacaaaata 60  
 aaggaattaa aatatcagct gacgggttac cactaaagtt gagcgggtatt cggttggacg 120  
 tagacggcag tttggtcact atgggtggacg cagacgacct cagagccctc atgtttaagg 180

aaagcctcaa ggaaaagtca aagctgcatg acccaaaatt tttcaaaagc tattatgagg 240  
agaataagga ctacttttat tatatgaçtc atacggagaa gaaaatgttt ctttçtçtg 300  
aagttgcacg agaatçacgt actçtggtgg gaaactçgtt tçtgçagaaa tatttgçaca 360  
aagtcattga gcacgaacac gcatact 387

<210> 2796  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E1-G5  
<400> 2796

caaatggcgt ctttçtact caggatagcc tçgçtgçtt tttgacatgt ataggacaag 60  
tçattccacg ttttçccaaa gtatttagag gcgttgggaa aacttttgç catagcaagg 120  
ccatçgaccg tgtgacggat gtgttgçata tgtçgttata ccaagggçct tgtgggtgçc 180  
gttatatgac gaatttgatg gataaagaca aagtcçatat ttgtgtggat gaaaatggag 240  
gtttaggttg tagttggatt çgtgaaagag acgggttgçt tttggtgçtt tçttgggttaa 300  
gtttgttgçc ttggaaaaat gaaaatçgat çagagtggat gagçatagag gatgtgatgg 360  
aacaacattg gaacatgtat gggaaag 387

<210> 2797  
<211> 223  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E1-G6  
<400> 2797

ccgggççgac ccaaacgtca gcacatggçg tçtttçtçac tçaggatagc çtçgçtgçt 60  
ttttgacatg tataggacaa gtçactccac gtttçtçcaa agtacttaca ggcgttggga 120  
aaacgtttgt ccatagçacg gccatçgacc gtgtgaccga tgtgttgçat atçtçgttag 180  
taccactggc çttgtgggtg gcgtçatatg acgaatçtga tgg 223

<210> 2798  
<211> 414  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-G8

<400> 2798

cccacgcgtc cgaatttttt ttggttcctt ttcgcatgtc ttcagcagca gttggttcgc 60  
aggcagaaaa ccaagacact cgacgtgcc aacgactaaa ggagtatcaa agagtagtct 120  
cccagcatag agatattgaa aatagagtgc gaaggcttcg tgaggaagtg aaaactctca 180  
agcaacaatt tgataagacg gaagatgact tgaaagcttt gcagagtgtt ggccaaatta 240  
ttggagaagt tcttcgagct attgatccgg agaaatttat tgtgaaggct tcaagtggtc 300  
cacgttatgt cgtcggatgt agaaacaaaa tcgatagaga taagctcgta cagggagcac 360  
gtgtctcttt ggatatgact actttgacca ttatgcgaat acttcctcga gagg 414

<210> 2799

<211> 286

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-H1

<400> 2799

agaaaatatg atacgacgaa aatgccaagg aaaaaaagtg caacagaaaa aaaacgttga 60  
tattgcaaaa gtttcttttc ggatattaca gtctctacat tttactcagc gagactctac 120  
aaggttgacc taaaaaaata ttatattcta gtttccaag cataggtata ctactcgta 180  
atgactacgt attcaaagtc ttcttccaaa tttctgtaaa taactagcaa gcgtttgctg 240  
caaacgatcg gacaagttta ctttgataac gtttttcaac gttgga 286

<210> 2800

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-H11

<400> 2800

aaaaaaaaa aaaaaataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aataaaaaaa 60  
aaaaaaaaa taaaaaaaaa aaaaaaaaaa aaaaaaacag ggggggtccc cttgggggttt 120

caatgttttt tttcctgtgg ggttgggtctt. gagacttttt ggggcgttcc tcttactttc 180  
tattctgggc ctgtcttttt acatcttctt actgggaaaa cccctgggtgt tttccctttt 240  
acccgcttgt gctgaattcc ccttttcgcg ggatgggtgt gggtcttata gggctttccc 300  
tgttttgcct ttccaatcct tttgtccacc tgtgatggga aatgggaacc cccctttttt 360  
tggccctttt ccccggtggg gtt 383

<210> 2801  
<211> 359  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-H12

<400> 2801

aaggacggtg ctagtgtgc tctttggact tgccgcctat ttctctatac agttgtgtta 60  
gcattttcag caacaataat tggacgtgat ggaaagaagg cagataacat atggaacgat 120  
gccctagatt atcatggaaa agtgggtgaac ttttgtgcat attcggcttc gtcagttttt 180  
gaaagtggcg accatggcgc atgtaaatat gtgatggctt tggcttctat cagcttgatt 240  
ttagttttct ttcgttgggt ggctccatt gtcgacgat tgtatccaat tcttaciaag 300  
ttctggtttg tggagcttgg tatcaagata ttccttacta tgtagtggat ggttgggtgc 359

<210> 2802  
<211> 281  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E1-H4

<400> 2802

ccacacgtcc gccacgcgt ccgccttctt acaatcaata ttcttcttcg tacggttcct 60  
ctagctatcg tctcttaact gcagacgaaa accaacttgt gagcagagga ggttatgcac 120  
caacaaacca atgtattcta gttcctatcc aatgctgcac tgattgcaaa caatgctacg 180  
ccgcatggag ttcttaaata ctgatacagt gctcggatag aaagaaacaa atatcaacgg 240  
atgtttgttt cttttacgtg aataaaactt gtgttcataa c 281

<210> 2803

<211> 334  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-H5  
  
 <400> 2803  
  
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 caacagcttt aacgttgctg actgctgcag taattggaaa cctatacata ttcgcaaact 120  
 tgctcagcat agtttcttac agaagttcaa agaaggagct gacggaagcc agtagtactc 180  
 aggaaaactg agaaacacaa gttgtcttca cgtctggagg atggaaatat tatctgaagc 240  
 taggctgggg gtctgttctt tgtagaagct ctggtgtttt gagaacttgc aattgttttg 300  
 ttctttgtag taaagaaatt gtcttctttt ttct 334

<210> 2804  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-H6  
  
 <400> 2804  
  
 aggcttcggg ctataaactt aagatgttgg tgattatctt tgaaatgggt gtagctttcc 60  
 actccgtaat tattggtctg aatcttggaa taagcacagg atcgacattc cgtacgttgt 120  
 ttgctgctct cgtatttcat caattctttg aaggatttgc tgtcggtact actgtttctg 180  
 aagcccagtt tggcacttgg attactatag taatggtact ttgctattct ttggaaactc 240  
 caatcggtat atctattggt attggtattg cacacactta tcaagaaaac tctcggcat 300  
 ctttgtaac gagaggcatt ttggatgcca tctccggtgg aattttaata tacacaggat 360  
 tgggtggagtt gttgact 377

<210> 2805  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-054-Q1-E1-H7  
  
 <400> 2805

agcccacgcg tccgcccacg cgtccgcccc cgcgtccgga caaagcctaa tccgaaacaa 60  
ggcattttctc agatgaagtg gagttttgat ggaaagtatt tggcttcttg taatgaaaac 120  
actccgcatg tcctctggat ttggaatgtt cttgaaatgg aacttgaagc agttttgata 180  
tgtcagacaa ctattaagac aatacagtgg aatccatatt gcttacaact tgcttttgtg 240  
acaggttccg aatatctatt tttatggaat tctcaagggtg ctgtcagtgt tccattaccc 300  
tttctgagt tttatccgca gtattgtact tggcctttgc aagagaaagg gacacttttg 360  
cttgctgaca agagccaatt ctgcctcgcc atggaagaag aataaagctg caa 413

<210> 2806  
<211> 382  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-054-Q1-E1-H8  
<400> 2806

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gcctgaagga cgatgagcac tatctcggtt tctctcaaga aaccgggata tgattccttt 120  
ctagggtttg ttcctataca atgtattggc ttgtcaccaa tgaaactatt caatacgtgt 180  
tgtgctcgac cgatgagagc ttggacctct ccaaccacca taaagtgtat ccaagacaac 240  
ctccatgagt ggggttcgttg taaagtantt cgttgtggac aaaaacatat atttctaggc 300  
cctatcaaca gcttaactgg ttccaaggca ctgcctatcg aaatanaaag ccaactggat 360  
gccgacttgt tgcgttctgc ac 382

<210> 2807  
<211> 373  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E1-H9  
<400> 2807

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gagaaaggta tccatattat gacgggtgaag tatatgatga cacgggtggtt gttcccccg 120  
aaacgaggcc caaaggaaga cgtgtcatag tagaagagcc agaagagtac ggaatgccgc 180



caggggacag agatgatagc gaagatgacg agcacattgg tggttggaga agaagagagc 240  
 agcacagcat gcagccttgg gaccagtcac cttttgaaca ttttgacaga cttttcgaaa 300  
 atccccctttc tgcaatggag agaggaggat tcggtggatt atttggtaac ttggaacagt 360  
 ccttaagaag act 373

<210> 2808  
 <211> 378  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-054-Q1-E2-A1  
 <400> 2808

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 aagaagggtgg tgcacggctg tcgaaagaac gtgctgtgga gtgagagaac gtacgagaaa 120  
 gccaaagtgag gaaaagaacg caagtagacg gcggcccgag aaaggagagg gcgtggggacg 180  
 tgatacagag tacgaagaaa agagaagaga gctacaaagg aggtaaaaga agaggtgggg 240  
 aggacgaggg gagggagcgg gggggcacga ggaangatcg tgaaggaagg aggaatccca 300  
 agtaatcgac gaagaaaaag cttcgggtgaa agcgtgaacc gagtttgtac aactgccccg 360  
 tcaagttctg ggagtgtg 378

<210> 2809  
 <211> 435  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-054-Q1-E2-A12  
 <400> 2809

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 ctagagcaat ggttggtgga tacctgtggg atcaaggaaa cgggtgaaga tttttatatg 120  
 cgttggaacg agcaacacat gtcttggttg caaccttttg aagaaagtca acgacaatgg 180  
 ttgcaaagat tgtattccac agcaccgatt gtacaattgc aagggaagat agaggagtgt 240  
 gaagatatcc ggattcaagt gagttggaaa gtatcgctat cctatgataa gcaacgcagt 300

ctttggtgga atcagaatag caacaaaaga gccagtcggg aaacttggtta tattctactg 360  
 gtaaatacca aactgaggaa aataagtgtt ttctgaagag ttgcgtcnct gaaaaaacag 420  
 gtgacaagga cattg 435

<210> 2810  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-A5  
 <400> 2810

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 tattcatgat gtgccaccta tatctacctg tgtagcact atgttctccg agttttggag 120  
 aagtcacac gaggaatggc ccaaacaaaa gcaaatgttg cgggccgatc aaagagaagc 180  
 gttgaatgaa ttgtcatcg caccaagtta ttatgcttga agcgttgccg gcgcgccagg 240  
 gaagccaggc tcgtggcatt tttttttaa aaaagaaaa agacgaaaa aaaaaaaag 300  
 gaaagaaaa aaaaaaaaaa aagaaaaaa acacggaacg gagagggcga aaaaacgaaa 360  
 aacgcgggga acgcaaaaaa aaaggggggg cccc 395

<210> 2811  
 <211> 167  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-A8  
 <400> 2811

gcgcgctcgt ggggtttttc gattcgtgtc ggcagtgttg gctgagaata ggaaaacatg 60  
 acgagatatt ccaaggaacc agagtaaccg acgaaaactt gcaaagctcg tggttcggat 120  
 agtcccgtgc acgttaaaaa cacgcgaaaa aacggacgtg gtttgaa 167

<210> 2812  
 <211> 216  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-B11

<400> 2812

gtcagcgaaa gaggtctatg agtagagaga tacgtcagag tagaatagaa aagccgtact 60  
gaagaccgac acaggtactc gatgagaaaa gagacccaaa ttaacgtgag agaattggacg 120  
ataacgaact acgcaaaatg atatggtatc tgcggtagaa catatgaaag aagcagcacc 180  
gactgttttag ccaaaacaca gcactctgca gaaaag 216

<210> 2813

<211> 382

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-B2

<400> 2813

agccacaaca agcatcagaa caaagtttgg gtggttccgc accgttatga ccgcttcgac 60  
cagaacagga gtatgtgaac aacaaagga aaccaagaag aagagtttgc aaggaatcaa 120  
cggaagagaa acatccaacg agacacaagt tgaatcatgc aaaaccacga gatggcggag 180  
attttggaag aagaggaaat cttcaagtta ctagaagctt ttagaaagta gttgccacgg 240  
gcagccagca gcgtgagagc tcaagaaata attgaagtac gtatttgcat cccttggett 300  
ttgaataatt cacaggagaa agagtaagtc tggtaagttc ttacggaga aagaacagtg 360  
ggagctgtgg gaaaacgttt tg 382

<210> 2814

<211> 328

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-B4

<400> 2814

caacatcatc aaatgccaaa gggaggaaag aaagattctt caaagaaaga agccacaagt 60  
aaacctgcat cagcagatgc tacaaagacg acagaaaagt ctggtccgga agccaagttg 120  
aagggaactg gtgcaaagaa acaataaaaa gttgactatg catgtgcagt cctgtgatgt 180  
tttgtgagtt ctgtttgata gtttccagct attcttttgg tagtgaataa agagaagatt 240  
tttgtagatg tagagagga aaaagaaaaa aaaaaaaaaa aaaagaaaaa aaacgaaaaa 300

aaaagggcag ccgccccaaa ggatccaa

328

<210> 2815  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-054-Q1-E2-B5  
  
<400> 2815

gaaataataa aagagagaga gcaacgacga cggagaagat gaggttattt caacgttggg 60  
aaagaattgg caactatttc atctactcgc agtactctag tcgaccgaat agtttatttc 120  
aagcagaccc taggaaatat aatatatatt tacagcatcg ggtggagaaa cacctagtgtg 180  
cccattctat ggttgcagca tccctacata atcctcgtcg tcttacgagt tgttcgtgag 240  
gagagcaaca ttggaaccaa gtacacaaaa caacaacaac accaagtgtg gataatcatc 300  
ctagtcgtga agaagaaaag agtttggtag tcgttcctgg tcaagagaca aaagaagaac 360  
aaggagccaa gcgacagagt cttcgagacc gaatattttc aagtttttcc g 411

<210> 2816  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-054-Q1-E2-B6  
  
<400> 2816

agatcgttgt tgagatatgc aaacttcctt cgcattctct tgttggacac cgttgcagcg 60  
aacttcaaag aacgtagttt gctcgtctag tttttgcaa aatagctcta ttccgttcca 120  
tgctaccaac agaaggagtt gtgtttttcc gctgtctttt ggtggagcgc ctgtcgttag 180  
ttataagtgg gaagtggctg caaacctgca gcgaaggcag tttgggtcag tttcgatgga 240  
ggtgcgtgtt gacgtaggtg aagggtgaacc tatcgattct gctatagcaa ggtttcggag 300  
agaagttagc aaaagtggtc acttgtttga gctgaaaaga cgacaagagt ttgaacctaa 360  
tagtgtgaag cgacaa 376

<210> 2817  
<211> 401

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-B7  
 <400> 2817  
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 atcctttcca ttgtgcactt ctccaaagtt tctgtggttt cgcgactttt gtaagtataa 120  
 aaggactaga aaaagtcccc atggtgggttc cttttggtgc gggtcgaagg aacctctttc 180  
 cgatggcgcc aagatcacga gtaggagaaa cagcagctca ttcaggtgga agcctagtgt 240  
 acgggttcgt tttgctaaga aatggcttcc ttcgaaggaa attttgggac agtggagaga 300  
 ctcgagcac gtgacacctg cggcagggcg gtcttcactt cttgggaata gaagattggc 360  
 tgttctagaa tatacacaag atatattgaa accacttcag a 401

<210> 2818  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-B8  
 <400> 2818  
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 atctagaaga atacaatcaa cttgagaaaa aggttcaagt aatcacaact tgcattctta 120  
 tctcatatca tctttctatc atggaccaag tcgatgcatt cgggtgcattg ttgttgtgtt 180  
 gcttctaga aaaacttggt gagagtgcta tgaactgttt gccagggagg gaggacggcg 240  
 ggggtgcaat gccatttat tggttgaga tccaagcgtc gtgttctgcc aacgtacaaa 300  
 ggataagcgt ccatagcaac tatatatggc acttcagct acaatgtatg caatgtagt 360  
 aaaaaacggg gtggattgca gtcgatcctt tgcaggaaac gacaagagt 409

<210> 2819  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-C2  
 <400> 2819

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acgacaagtt cgaaaaaatc gtcgctacag gtgccaaagt tgtacttagt aagttggcca 120  
tcggagattt agctacgcag tattttgccg atcgagacat attttgtgct ggtaggtttc 180  
cagaagaaga catgaaacgt gtcatgaaag ccaccggtgc aagcatgcag tcgacagtga 240  
aggggcgaag tgaggagtgt tctcggtact tgcgcattgt ttgaagagaa gcaagttggt 300  
aatgaacgtt acaacttttt cactggttgt ccatatgcta gaacagcgac atttagtatt 360  
cgaggtggtt cggagcagtt tatggatgaa a 391

<210> 2820  
<211> 227  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-054-Q1-E2-C9  
<400> 2820

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gagaggggtan gcttagaagc agcaaaccag agaggaaaac gttaaagcat gaaagaaaag 120  
aatccgaaa aagaagagaa aaaggtaaga aagaggaccg aatcanggta agagggtanag 180  
gagcaagaag agaagagaga atgctgggtg gagtagcgaa acaagag 227

<210> 2821  
<211> 196  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E2-D12  
<400> 2821

gcgtcagcca ctacatgagg attaggaatc taactgaata aggaaaacaa gcttaagcta 60  
gtttagctgg ggaagtaaag cctaagaaag agtaaattat gcaagcaaac gcgggagaga 120  
agtatactag cagaagcatt cttggggaag tagatagaga tttcagacac ggaataaaag 180  
tctgctatcg agaaca 196

<210> 2822

<211> 377  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-054-Q1-E2-D2

<400> 2822

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 tgtaatacga ggccagagaa agggagccgg tagtgtagtt cgtgggcatg tcgtcaaaag 120  
 aaaaggagca gccaaagtga gagcggttga ttatgccgaa agacacggat atgggagagg 180  
 agtcgtcagg gaaatcatat acgacgcagg aagaggagct cctttggcgc gagtggaggg 240  
 tgagggatgg gtagagagat aagagaagag tagagacttt tatggcacca gaaggtttat 300  
 atacgggaca attcgtgtat tgtggaaaga aagcccaact agcaatcggc aacgtccttc 360  
 cacttggttc cttacct 377

<210> 2823  
 <211> 396  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-D5

<400> 2823

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 caagtggatg acgagaattt acgtgcaact agcagactta gtgtcgggtg acaagcaatt 120  
 tttttgcaac ctgggtgattg cctagccgat gtggatgtca tgtgcatcgt catgggtcca 180  
 aaagggatcc tcggagttgt atttcttggc agttggcaga gatggaacag gagagagagt 240  
 aggaggatta gatattccgg aacgaaaacg atatcaagta ggagtttatg tgatgaagtt 300  
 tgatcggaag aaggaaccga aagaagagct tcgatttttc cgtgcgtgtc gaagcgatga 360  
 agttgtgttg tgcaccaaca caggaagaat tgtacg 396

<210> 2824  
 <211> 369  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-D7

<400> 2824

aggttggaat tgaaaggagg gtcgacgagc tcagcttgaa gaagcgagaa cttgcgtggg 60  
gttggacgtt atttatgaac ttggactcta aggacagatg aattaatgcg ccttttgacc 120  
cgtgtgcaga cgcctcacct ggatatgacg caacagtatc ggaaaatata atgcagattc 180  
gcttgcaaga tagaaatcga cgcaaataca tgacgacgag tcatgggcgt gacaggcgag 240  
tggggtttga ataaaattac aaaggccttc aaagaggagt tttgttgcaa tcgttgtgtc 300  
gtatacgacg cacaactggg aagagtcac ccatctgcaac gagaccacag ggattaagtc 360  
aatcagttt 369

<210> 2825

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-D8

<400> 2825

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acgttgacca agctccaaga tctgaaagca gccgcattca acagagatac gacgcacaga 120  
gagaagcgga agcaagtga cggagttgac gaagaaatgg aagctcaaga atggctccac 180  
tggatagaga caaaggcaga ttcgtcaaca ctgcacatcat tgaggagcgg ggtggaggcg 240  
agaggggaag accagcaatg gacttttctg tctcccttt tagagaaagc ctattccacc 300  
gtcaacagcg aagatttatc agccgaatcc tgctcagtgc aacagcttat tcaaaagaaa 360  
gacgaagaaa tagctttttt gcggcaacga ctagccgaag ttgagcaagc 410

<210> 2826

<211> 169

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-E10

<400> 2826

cagtttgtat agtttgcca ctgcacctc acatgcatga atagcgcgta caacacacac 60  
gattctgggt ccagcttttg aaagcactcg ctttgttccg tgaacacatg tcgttgattc 120



acaccggcaa cacaacttaa ggaacttga ctccacattt gaaagtccc

169

<210> 2827  
<211> 365  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-054-Q1-E2-E2  
  
<400> 2827

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agacatgcag gtaggtaaag cgaacgggtg agtaaagagg tgtgagggag tggaagaaca 120  
tgagagcaca gaagaatgta agaaaggggt agagtaaaaa ccataaagga agtgggagcg 180  
ggaatctgag aggaggaaaag ccacagtga actgacaaaa ggtccaaacg agagaagtcg 240  
ggggtgggag acgacggggg caatgtacag ggaagtatga ccagtgatg aggactggag 300  
taaacagaaa aggaagtaaa aggaggaat gaagggaagt tatggcaaaa acacgtgcc 360  
gcagc 365

<210> 2828  
<211> 350  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-054-Q1-E2-E5  
  
<400> 2828

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ccccccccc cccccccacc cccccccccc cccccccccc cccccccccc cccccccccc 120  
caccgccc cccccccacc ccccccgcaa cccaccccc ccaccccccc cccccccccc 180  
ccccccccc cccccccccc ccccaacccc cccccccccc cctccccccc cccccacccc 240  
ccacccccca cccccccccc ccccccgcc cccccccccc cccccccccc cccccacccc 300  
ccccaccccc cccccccccc cccccccccc cccacacccc caccaccccc 350

<210> 2829  
<211> 251  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-F2

<400> 2829

ttccttcagc tgagctgaga cagagacgtg tacatagtga cttgcggaaa tccatccaac 60  
tgcgcggaac gttatcccga agaacactgg atatacgtcg gtttattgga ttgttttagag 120  
cacgttagtg gggggcgtgg cgggcgggat ccagagtgcg cggactaaac tttgcctctg 180  
atgaacgctg gttccaaata tgaatatctt tggcaagaca acgaccaaca taagaaatca 240  
accacagttt c 251

<210> 2830

<211> 395

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-F6

<400> 2830

cccacgcgtc cgagagggga ttggtgggtc acgaacgaga ggatgttggt cttttcgttt 60  
ttcaaaacgt ttatcggcaa aagagttaca gtagaactca aaaacgatgt aattattcga 120  
gggaaagtac attcagtgga tcaatatcta aatatcaagt tggaagatat agaaatactc 180  
aatatagaaa gttgcccaca gttgatgact ttgaaaaatt cgtggagggg tgggggtggg 240  
aggaggtata ttcaagtata cgctatcgac gtcgactgcg agatgctaca ggaagcagcc 300  
agaagagaat acaaggagtt gaagaaagta gccaaatagg gcgcaagaca cacgttacca 360  
ttgtctatct atccacggcg tgatgaacca actgc 395

<210> 2831

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-054-Q1-E2-G1

<400> 2831

ctcagtcaga actgcttctc agttagttac gcaatatgcc tagtcataag gaacaaaata 60  
gaggaattaa aatatcagct gacggttacg cactaaagtt gagcggtatt cggttggacg 120  
tagacggcag tttggtcact atggtggacg cagacgacct cagagccctc atgtgtaagg 180

aaagcctcaa ggaaaagtca aagctgcatg acccaaaatt tttcaaaagc tagtatgagg 240  
aggagaagga gtacgtggta ttatatgact catacggaga agaaaatggt tctttctctg 300  
gaagttgcac gagaatacgc tactctggtg ggaaactcgt ttctgcagaa atatttggac 360  
aaagtcattg agcacgaaca cgcatactaa gggaaccaac g 401

<210> 2832  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E2-G5  
<400> 2832

caaatggcgt cctttcgacg caggatagcc tcgctgtctt tgtgacatgt agaggacaag 60  
tcattccacg tttttccaaa gtatttagac gcgttgggaa aacttttgtc cagagcaagg 120  
ccgtcgaccg tgtgacggat gtgttggata tgctgtagg gcaagggcct tgtggttggc 180  
gttatatgac gaatttgatg gataaagaca agtcgagggg ggggtggagg agcgggaggg 240  
ttacgttgta gttggattcg tgaaagagac gggttgtttt tgggtgctttg ttggttaagt 300  
ttgttgcttt ggaaaaatga aaatcgatca gagtggatga gcatagagga tgtgatggaa 360  
caacattgga acatgtatgg ggaaaga 387

<210> 2833  
<211> 385  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-054-Q1-E2-G8  
<400> 2833

gagccacgc gtccgaattt tttttggttc cgtttcgcat gtcttgagca gcagttcgtt 60  
cgcaggcaga aaaccaagac actcgacgtg ccaaggcact aaaggagtat caaagagtag 120  
tctcccagca tagagatatt gaaaatagag tgccaaggct tcggcgagga agtgaaaact 180  
ctcaagcaac aatttgagaa gacggaagat gacttgaaag cttggcagag tgggcgcgcg 240  
ggtagtgggg aagttcttcg agctattgat cggagaaaat ttagtgtgaa ggcttcaagt 300  
ggccacggtt atgtcgtcgg atgtagaaac aagatcgata gagataagct cgtacagggg 360

gcacgtgtct ctttgatat gacta

385

<210> 2834  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-054-Q1-E2-H1  
  
<400> 2834

agaaaatatg atacgacgaa aatgccaaagg aganaaaagt gcaacagaaa gaaaacgttg 60  
agattgcaaa agtttctttt cggatattac agtctctaca ttttactcag cgagactcta 120  
caagggttgac ctaaaaaaat attatattcg agtttcccaa gcataggtat actaggcgtc 180  
aatgactacg tattcaaagc cttcttccaa atttctgtaa ataactagga ggcgtttgct 240  
gcaggggatg ggacgaggtg actttgaata acgtttttca acgttggatt atttgccaca 300  
acttcggtaa cgttattgat gagcaccttg atagaaagat gagataatac aaagcgcttt 360  
ttcaataaaa acataacttg tctg 384

<210> 2835  
<211> 331  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-054-Q1-E2-H10  
  
<400> 2835

gaattaaagg gtcgacgcac gcgtcagcgg acacgtgggc ggacgcgtgg gcggacgcgt 60  
gggttcctag tggatatgtt acagaggaga ttgatcgata tactggtttc gagcaaggag 120  
ctatcaattt aacttggagt tatgatgcct ttgttactgc ggtttggtca agagaagatg 180  
ttcacaagtt gttttctaaa tattgtgaac ctcttctcc acctctacct agtatgccag 240  
gacctggtgg tttatcttct ccataataag aggcacttgt gcactttgga tatttttgtg 300  
gttcacataa agacaagctt tattaagaag c 331

<210> 2836  
<211> 223  
<212> DNA

<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-H11  
 <400> 2836  
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 tacaaaaaga aattgatcaa aataaatgag tttcaaaca agaaaaaggg ggtctacctt 120  
 aaagtttcta agcttttggt acctcgagtt tggccaatat aactctgttg aggtgtcccc 180  
 aactttcaat tctggggccc cttttttaaa tcttcctact ggg 223

<210> 2837  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-H12  
 <400> 2837  
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 ttggacttgc cgcctatttc tctatacagt tgtgtagca ttttcagcaa caataattgg 120  
 acgtgatgga aagaaggcag ataacatatg gaacgatgcc ctagattatc atggaaaagt 180  
 ggtgaacttt tgtgcatatt cggtctcgtc tgtttttgaa agtggcgacc atggcgcatg 240  
 taaatatgtg atggctttgg cttctatcag cttgatttta gtcttctatc gttgggtggc 300  
 ctccattgtc gacgcattgt atccaattct taaaagtgc tggtttggtg agcttggtat 360  
 caacatatcc cttactatgt ggtggatggt tgggtgaatt gtggtgactg c 411

<210> 2838  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-H2  
 <400> 2838  
 gggtcgacct aagggtccgt gcgaaagagg acgtaggacg gcattgtgga agagcgtttt 60  
 gggtcctgga gagctcatgt ggagaacaac gattgtatcc ttgttaagaa gaaaacctag 120  
 tcaggggtta ttgaagagaa gttttgccga tcaagttgct caaggctcag aaaaactaaa 180

acttgggttt gcgagcacct acacatgccc ttcgaaagga tgctctcgtg gatatggtag 240  
 tgttcccagc aggtagtggg aggggtggggg tagttcggtc aacatgtgcc tacagttgct 300  
 caactgaaac ctgggtgtgt gactgtcgtg gaagatggca aggaggacaa atattttgtg 360  
 agtagtggat ttgcctttgt taccaaagaa cgaacagata ttttg 405

<210> 2839  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-H3  
 <400> 2839

agacttggtg aaataaagca aggagatcca ctcaatttgg agactatggt gggagctcaa 60  
 gtatctactg aacagatgga taagattctt cactatgtgc aattgggaaa gaaggaaggt 120  
 gctcagtgtg ttgttggacg aagtggaaag aaagctattg gaggtgattt agaaggtggc 180  
 tattacattg aaccgacgat attcaaggga gataacaaga tgagaatatt ccaagaagag 240  
 atatgtgggc gagttctgag tgtcacgact ttccgtacag aagaagaagc catccaaatt 300  
 gccaacgata cttcgtatgg tttaggtgct ggtctgtgga ctcgagatat tatgaaagct 360  
 tatcgcgat ctcgagcaat caaggctggt cgtgtttgg 399

<210> 2840  
 <211> 283  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-H4  
 <400> 2840

cgcacgcgtc cgcccacacg tccgccttcc tacaatcaat attcttcttc gtacggttcc 60  
 tctagctatc gtctcttaac tgcagacgaa aaccaacttg tgagcagagg aggttatgca 120  
 ccaacaaacc aatgtattct agttcctatc caatgctgca ctgattgcaa acaatggtac 180  
 gccgcatgga gttcctaaat actgatacag tgctcggata gaaagaaaca gatatcaacg 240  
 gatgtttgtt tctgttgacg tgaataaaac ttgtgttcat aac 283

<210> 2841

<211> 382  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-054-Q1-E2-H5  
 <400> 2841

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agccccacgcg tccgcccacg cgtccgatcg ctataggaaa gtgagcaata cagtcttcaa 60
ggcaacagct ttaacgttgt cgactgctgc agtaattgga aacctataca tattcgcaaa 120
cttgctcagc atagtttcct acagaagttc aaagaaggag ctgacggaag ccagtagtac 180
tcaggaaaac tgagaaacac aagttgtctt cacgtctgga ggatggaaag atgagcggaa 240
actaggctgg gggctctgttc cttgtagaag ctctgggtgtt ttgagaactt gcaattgttt 300
tgttctttgt agtaaagaaa ttgtcttcgt ttttctaaaa aaaaaaaaaa aaaaaaagaa 360
aaaccgacaa acgagacgcg ac 382
  
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<210> 2842  
 <211> 404  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-054-Q1-E2-H8  
 <400> 2842

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gcctgaagga ggatgagcac tatctcggtt tctctcaaga aaccggata tgattccttt 120
ctagggtttg ttcccataca aggtattggt ttgtcaccaa ggaagctatt caatacgtgt 180
tgtgctcgac cgaggagagc ttggacctct ccaaccacca tagagtgtat cggagacagc 240
gtcgaggagt gggttcgttg taaagtattt cgttgtggag aagaacatat atttctaggc 300
cctatcaaca gcttaactgg ttccaaggca ctgcctatcg agatanaaag ccaactggat 360
gccgacttgt tgcgttctgc actcggattc tatcgcaagc aaag 404
  
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<210> 2843  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-055-Q1-E1-A10

<400> 2843

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agtcataagg aacaaaataa aggaattaaa atatcagctg acggttacgc actaaagttg 120  
agcgggtattc gggttgacgt agacggcagt ttggtcacta tgggtggacgc agacgacctc 180  
agagccctca tgtttaagga aagcctcaag gaaaagtcaa agctgcatga cccaaaattt 240  
ttcaaaagct attatgagga gaataaggac tacttttatt atatgactca tacggagaaa 300  
aaaatgtttc cttctctgga agttgcacga aaatacgcta ctctgggtggg aaactcgttt 360  
ctgcagaaat atttggacaa agtcattgag cacgaacacg cataactaagg gaaccaacg 419

<210> 2844

<211> 412

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-A12

<400> 2844

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gagattcaag taaggaattt gggatttcgt tttatgacac tttgggttatg tggtcgggtca 120  
tcagaactta gcaactggct tctcgatggt tcactttacg aattttgctg gccttcgata 180  
ataatcatct ctctaggatt tggttgttgc cataccagat atgagtttga atgggttagct 240  
ggattttctt atggactcat gggttcagggtg gtcgctataa aggataaaaa tgtcataaat 300  
gcaatccagt ccactgtatc acaaaccttt gtttaaattg ttacattttg atgtctggta 360  
acttttattt gtggtagttt gactttgcaa ataggttttc actatttggt tg 412

<210> 2845

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-A2

<400> 2845

agccccacgcg tccggacaaa aatagataga cagaacaaga ctggtgatgt cagagatttg 60  
gagaaaaata cgagctacca ggagaaatat gattatcttc tcctttcacc aggtgctgaa 120



cctattcgtc cgaagctgga aggaatcgat ctagatggcg tttactccgt aagagacata 180  
cctgatgctt cgcataattaa agaatggatt gccaaaaata atgctaaaag tgcagttggt 240  
gttggaggtg gctttattgg tttagaaatg gctgaaaact tatctctttt aaattttaaag 300  
gtccatgtag tagaagctct ttctcatttg atgcctgcaa tggatcccga aatgttgctt 360  
ccactataca gaaagatgga agagcatggt gtggacataa tttttcatga tggattgaaa 420  
agtatagtga agga 434

<210> 2846  
<211> 426  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-055-Q1-E1-A8  
<400> 2846

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tctttgatat tgctatcggg ggacaacctg caggaaggat tgtattcgag ttgttctccg 120  
atgtcgttcc taaaaccgcg gaaaatttcc gtgccctgtg taccgggtgag aaaggggttg 180  
ggtacaaaga ctccaagttt cataggatca ttccccagtt catgtgccaa ggtggagact 240  
ttacacgcgg cgatggaacc ggtggcaaga gtatttacgg caccaagttt gaggatgaaa 300  
acttcaagtt gaagcattcg gagccctttt tattgtccat ggccaatgcc ggaacgaata 360  
ccaaccgaag tcagtttttc attacggtag tgaagacacc ttggttggat gggaagcatg 420  
tggtgt 426

<210> 2847  
<211> 331  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-055-Q1-E1-A9  
<400> 2847

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cgtcgatgga actcagttgg cttctggagg aaacgataat ttgttgatgg tttgggataa 120  
tcttcactcc agtcaaccaa aatatcgttt agatcagcat cttgcagctg taaaagccat 180

tgcttgggtgt ccttggcaat ctcatctact tgcaagtggg ggaggaacag cagatagaac 240  
 gatcaagttt tggaatacta caactggctc ctgtttacag tccatcgata caaaaagtca 300  
 agtatgtgcc ttgctctgga atagacatga t 331

<210> 2848  
 <211> 418  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-055-Q1-E1-B1  
 <400> 2848

agcccaagcg tccgccacg cgtccggtca agtgggtacag tcggaacaag acctgaaaag 60  
 ctgtttggaa cttagaaagc taatattcgt tcaagaacaa ggagttaggg aagatagaga 120  
 gcaagatgaa tacgatcgag tggattcaac cgttgaaagt ttgggtccca gatggaaagt 180  
 taaacacttc ataacctggt taggtaacca agtgggtgca actggtagag ctcgtcgtaa 240  
 ttcgatgttt ggaataaagt tagaaagaat tgctgttcga aaagaagaac gtataaagca 300  
 cattggcgaa aactgcttc aatttatgtt gagagaaata cagaagaaaa atgcggctat 360  
 taatttgcac tcgcagaacc ctgtgggttac gttttatgag agtttgggct tttcaact 418

<210> 2849  
 <211> 115  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-055-Q1-E1-B3  
 <400> 2849

caggtatcac cctaagctac ttgatcttat gctgtccaag cgaagtaatg ctgaaccaat 60  
 atctgtggca aattatttgc aagatatcgc ataaagcttg agatgccact caatc 115

<210> 2850  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-055-Q1-E1-C10

<400> 2850  
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tgtgcctttt ggtaacgctt ggtggtacac caaaaccaga gtatgtcaag tagtgggaaa 120  
aaaagtattc tcctaccgaa ccatctcaat gtggagaaac caccctgttg tccatcgttg 180  
aaaacgatat gtctccactg gattgctcga aatactgcac gcgtaggtga actgggggat 240  
gtaccggatg agttgatgta caaagttggt tgtttatgtg gagcaaaaga cttggcaaga 300  
ctggaagaca acaaccctgg aagagaagca gtgtntgaag cactgtgggc agcgttgttg 360  
aagcgagatt ttagtangga agaagggaat gaaagcccat cacaacacca ccatgtggca 420  
agt 423

<210> 2851  
<211> 141  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-055-Q1-E1-C3

<400> 2851  
catcatgcat ttagagttt gcatgtgcta tatcagtaac aatcgactat agatacttaa 60  
agtcactctgc acacgtggtt atcggatgcc atggaaggcg cagagtccac tgacgtgcat 120  
ttgattcatg gatcgacgtt a 141

<210> 2852  
<211> 287  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-055-Q1-E1-C5

<400> 2852  
cggggcgacc caagcgtcag aacacgcgtc cgcccaagcg tccgccaag cgctccggata 60  
atthttgtaaa taaagtcgta atthttccttt caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaag aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg aggaagatca 180  
aaaggaataa aagattaggt aagaaagtaa gaaaaagtga aggtcttcaa agaggttact 240  
gaaaggaaat taacgggcgg tagttaaaaa aagtcgggag ggggaaa 287

<210> 2853  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-055-Q1-E1-D11

<400> 2853

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 tatcggcgag cgaagcggga agagccacta tgagaatcct ccttttcctt tgtgaaaaga 120  
 ggagatgtat ttgaaaaaag acaagaaata tctgcagcaa gaaaagagca aatttcctgg 180  
 aatggaatat catggagggt gagaatcncg tttatctctt ttctttgtat tcaagctgcg 240  
 ttacgatatt ttttgttgtg gagtcgggtt gtttggtagt acagccttaa ttttgtgggt 300  
 gttataaatc atccaaggct aaatacgtaa agagagaccg atagcgaaca agaacatgag 360  
 gaagaaagag gcaaatacgg gaaagcagta aaagaagaaa gagaaaggaa aaaactgag 419

<210> 2854  
 <211> 345  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-D8

<400> 2854

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 tcaacgggta ctgacgtact tgagtgcaa tattctcaca agacattgtt caaagagtgc 120  
 ggaagtgaca tttaaagttt tacacgatca ctttaacttt tctttgagca tgaatgggag 180  
 aaataacgtg tatgctgaat ctgtttgtgt gtgaatttga agaataacat ttcgcttctg 240  
 ctgatgtaat ataatttaca tgggttaagt ttggtatgta tcatgtacag aaatcttcgt 300  
 atcaacttac gtcatttctc gtacgatctt ggtataggga tacca 345

<210> 2855  
 <211> 178  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-E1

<400> 2855

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cgaaaatgtg gatagtcgag agggaaaaag cccagaagcc aagataaagt atcaaagtta 120  
agaaagaagg aaaaggagaa gaagagaggg taagcttaaa agcaacaaac cagagaag 178

<210> 2856

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-E11

<400> 2856

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aaatacgtaa accgagaacc ttacctctcc aagaatgtgt tgcacggctg tcgaaagaac 120  
gtgctgtgaa gtgagagaac gtacgagaaa gccaaagttag gaaaagaagg caagtagagg 180  
gcgccccgag aaaggagagg gcgtaagacg tgatacagag taagaagaaa agagaagaga 240  
accagaaaag aagttaaaaa aagattaaaa gactaaaaga agtacggaat tcacgaagaa 300  
cgagcctgaa tgaaggagga atcccaagta atcgaagaag aaaaagcttc ggtgaaagcg 360  
tgaacggatt ttgtacacac tgcccgtcaa gttctggaag tgtgc 405

<210> 2857

<211> 426

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-E6

<400> 2857

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ttacggttga cttgtcgcgg cagtgtagct tgaaggatat attttcattg aagcttctcg 120  
acaataactt taagttggcg tgttttaaatg atgccttggt tttagtttta ccaggcttat 180  
cctttgttat tactggtaat cgtatattct gtagacgctc ggacttgaat gaaacggaag 240  
cattggagtc ctgcttttctg tttatgaaga tatgccccac gtacaagtcg ttggagattc 300  
ttttggaagg cgagcaaatt tatgtagaag aactcgtgcc tattgtattt cgtttcgttg 360

aagaacttcc tcactttctt ttgacaatt ggaaaaccgt aagttacggc tctccctcga 420  
agaagg 426

<210> 2858  
<211> 155  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-E8

<400> 2858

cgtcagaaaa ttcattcatc gttgctcact cttgttgcac atatgacatg tcgtcgtaga 60  
cgtggtaaac gtttatgata acgacgtgca taccgtcatc ccatagtctt gggagacagt 120  
atccacggaa taatcaaadc agctatccgt cggtt 155

<210> 2859  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-F12

<400> 2859

cgcgtcagca gacgtacaaa agttttggca caaaaactgc aaaaccacaa acgctcgcta 60  
cttgatttaa catgccttcg acgaatgcc aagaacaaagt tcccgatagc cggtcgggta 120  
tgaggagacc caaccaacct ctaggtattg tagatactgc caagtcggaa gagttttccc 180  
aaggctcctt ttctttattg gtggattgtg tgaaagatgg tactccagtg ttgatcaatg 240  
tgaggaataa caaaaagttg ctaggaaaag taaaggcttt tgaccgtcac tttaatatga 300  
ttctagaaaa tgtcaaagag atatggacag agatacaaaa gagtaaaaag gctagaccag 360  
tcaacaagga tagattttatt ccgaaaatgt ttttacgtgg tgactcggta g 411

<210> 2860  
<211> 347  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-F5

<400> 2860

agagtcgatt ctcaaggaaa gatacaaaca tatgttgcca acagagaatt actgctggat 60  
atgtgcatcc actcaaaacc tggggtagat gtaaaccaaa agaaacaacg gttattgtca 120  
ttcttagcta gtcaggagcc ttgttatctg tgggaagaag aagatcgtca tcaagaacca 180  
caaatagata gtttatatat ctctagtgtc gggtagaagg cgatcatttt aagggacaag 240  
atgttggttg ttcacaattg gtcccttgat ggagaacaac ggtgggggtga tggatgagaa 300  
taatagtttt gcatatttca tgtcttccag tttttatatt atgtttg 347

<210> 2861  
<211> 274  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-F7

<400> 2861

aacagtagct tagacagtaa catatgcttc taggttcagc gaacgggtga gtaaagaagt 60  
gtgaaagagt ggcagaccat gaacgcacag accaatgtta gaaatggta gagtaaaaac 120  
caatcatgga tttatagcgg gaatccgata cgaaggaagc cgtaatggaa ctgaaaagtt 180  
gtccaaacaa ggaattcag cagtggggat atttggccaa tgtacagga agtatgaccc 240  
agtgttgaag agtggagtaa gcagaaaggg aagt 274

<210> 2862  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-F8

<400> 2862

aggggatgtc gtcgcaaccc gtcttagtgc ttgcgactt ccaaatgat attatgggtt 60  
tcgttcccc tgagaagaag gaagccgtca ttaaaggagc ttcgaaactt ttgaactttg 120  
cccgtgagaa gaagatccct gtagttcatg tgggggtacg ttttagaccg ggacaccctg 180  
aagtttcgaa acgaaacaag atgctttctc ttgtttcctc cagaggcccc atccttgttg 240  
aaggtagtcc tggaagtgtc cacgtagcag agttgaaacc aattgaaggt gaattcagt 300  
ttacaaaaag aagagttggg gcacattata ataccgatct tacaaccatt cttagccgct 360

tggggcgcta cccacctgat tttgggaggt gtttctacaa gcgaggttat tctgtcgacc 420  
gttcgttg 428

<210> 2863  
<211> 439  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-G1

<400> 2863

acgcgtccgc ccaagcgtcc ggtgcaacga tggagaaagt ggcgaaggaa aaccgcttga 60  
agaggtgcaa acagggaaac tttttgcgtt attatctgaa gaactttgta aagtatgtat 120  
actggaaaaa gttaccgtga agagtttagg ccaacaagaa ttggcaactt tttgtttcgt 180  
caactccgcc ttggtctgca aaatagacct tgaaagtcac tctagagcga tggttcgcgg 240  
tattttcaga ctcttgtttg ggaaatattt ctgtaacaag tttgggaaaa ggaaaacaag 300  
tatttacttg gttgtattct ctgagaatgg attttttgcg gggaaacgac ttgtcgggag 360  
accaagttcc aatggtccac ggatcactgt gcaacaaata ttgattgcta tacgttcccc 420  
atttgctggg ttgttagat 439

<210> 2864  
<211> 404  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-G11

<400> 2864

ccacgcgtca gtagatgaga cgcttgaacg aaaactacgg agatagacat accaacaaaa 60  
catcggcgac ttgttccgtc gttccaagaa attgtgccgc tgtggttttc aagctatttc 120  
gaaaactttg gggcatcttt tcaaaagcct ttgtccaatc gcccgataac attcgttcca 180  
tagctatctg ttccagttgg tcaatccaac gaccagcga catggcacgg tgctgataaa 240  
agtacgttgg actcaaataa ataaccacca acaaaaaaaaa aaaagaacta aaaagaaaaac 300  
aatcaaaaaa aattcggagg aaaaaccaca agatcaaaac aaaaaatata gatgattaag 360  
acatcaaaca aacttctata attctaaaaa aaaagggggg gccc 404



<210> 2865  
 <211> 458  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-055-Q1-E1-G4  
  
 <400> 2865  
  
 cggtcaggaa tatcgggccg agccacgcgt caaccaagc gtccgaaccc gtgtagtcta 60  
 tgcagtaaaa gaaagaatga gtaagaaaaa agggagtcac tccaccaggg gagtaaaggc 120  
 gcaagaaaga aacccaaagc aattgacggg aatcggaana aggggtggat cacgtaaatt 180  
 aatccgatat aaaccgagaa ccttacctct ccaagaaggt gttgcacggc tgtcgaaaga 240  
 acgtgctgtg aagtgagaga acgtacgaga aagccaagtg aggaaaagaa ggcaagtaga 300  
 gggcgggccc agaaaggaga gggcgtaata cgtgatacag agtaggaaga aaaactttta 360  
 gcaaatacac gaacaatgcc aaaaaagaaa aacctctcgt cgtaaagaaa agtgtacaga 420  
 atcttctatg gataaacgga ccaaggaaat atacttgg 458

<210> 2866  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-055-Q1-E1-G5  
  
 <400> 2866  
  
 agccacgcg tccgtgtgtg gtgacttggg tgaaaactta tctctttgtt ccgtcttgtt 60  
 cttgtctttc tacaaaactt gcaagtggaa aacaagtagc agttgattca agttggaaaa 120  
 gatgtggaca gttcaaggga aatcgttcct tctccatgc tgctcctggc actcttaaca 180  
 aagcaaggtc caggttttct gtttccatga aaaccgaagc ttgggtaaag ttgataaaaa 240  
 ctgagcaact aaagccggga gacttgaaac cttttttcgt tgctggccag tctttgctag 300  
 tagtatgtga ctatgacggt caagtatact gttctgcaa cgtttgtcca caatttgga 360  
 caacaattgg atcaaggaa ggtatctagt ggtaacttga tatgtgcca gcataagact 420  
 tc 422

<210> 2867  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-055-Q1-E1-G9  
  
 <400> 2867  
  
 ccacgcgtca ggaaattgga tttggttttg tgacaagtat aaagcaaaca gtgcacctgt 60  
 attattatcg tttttgttgt tgttgtaaca gcctgtgtct ctctaaagag tttcttgaaa 120  
 tgcagagagt tggattgggt ggtgattcgg tcaccaagct tcacttggtta aggcgagctt 180  
 tctcgcaata tgcaagacct tggaataatc ctgaaggaat atatgccttt gttcgacgtt 240  
 gaaaagattg gggctcccta cccggtagag aatggactaa tgatgagcta agattaaaat 300  
 cctttgacga cttgcacaag ctttgggtggg tccttataaa ggaaagaaac gctttgttaa 360  
 ctgaaagaga ctggtg 376

<210> 2868  
 <211> 97  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-055-Q1-E1-H1  
  
 <400> 2868  
  
 acgcgtcagg agggaataat gtcaaaataa aacagaatga tatgaccccg gaaagttttt 60  
 ctgaaaaaaaa aaaaatccaa caaaaattcc atgcaaa 97

<210> 2869  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-055-Q1-E1-H10  
  
 <400> 2869  
  
 acgcgtcagt gatgggtgga gtagcgaaac aagagaaggg aagtaaaagg taagaaagag 60  
 gaaaggttta cgagagaagg aagtagaaag aagagagtgt aaggcggcgt cataatagaa 120  
 atccgaaaagg agtagaagaa aagagagaga agaaagaaaa gaagagaaaa gccgtactga 180  
 agaccgacac aggtactcga ggagaaagga gacccaaatt aaggtgagag aatggacgat 240

aaggaactag gcaaaaggat atggtatctg cggtagaaca tatgaaagaa catgaggaag 300  
aaagacgcaa atacgggaaa gcagtaaaag aagaaagaga aacgaaaaaa ctgagtatca 360  
ggaagaaaag agggagtaga tgaggacaga aagatcaagg aagtaagagt aagagaagga 420  
gtaatg 426

<210> 2870  
<211> 228  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-H3

<400> 2870

agcggacgcg tgggttttta tggaaagata taccgagtca tttattgaag aacttgacca 60  
atlttgat tgtattctgc atgacaaacc tgttccagt acaggttggg atggaagagc 120  
tccagtcgtt attgcgttgg ctgcgaagaa aagttatatg gaaggacgtc ctgttcgcat 180  
agaagaagtg gattatagtt tgtcctagta aagtttgtat tatttttg 228

<210> 2871  
<211> 427  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-055-Q1-E1-H5

<400> 2871

agacttggca aaagcaattg ataagagaat gtggccacat tcgcatacac ctcttcgaca 60  
gttttcatct cagttacctg aagaagtact gaagcgaatt gaaagaaaga cagatttgga 120  
aattgatcaa tacctagatt tatctccagc ggaattagga gagttgtttc gaagtccaaa 180  
agatggcaag acgattcatc gcctattaca tttattgcct agaatggaat tggctgtcca 240  
tgtacaacct attacgcgct cgactattcg catggaattg actttgactc ccgatttcct 300  
tttcgattcc aaggtacatg gagcaggaga acctttttgg atctgggtcg aagatcccga 360  
tggaagaaaa ctaatgcatg tagaaccttt tttctgcgag cgagtttaag tcaagaggag 420  
catacag 427

<210> 2872  
 <211> 354  
 <212> DNA  
 <213> *Cyanidium caldarium*  
  
 <223> Clone ID: LIB190-056-Q1-E1-A1  
  
 <400> 2872  
  
 gagtgtgcgg cctgccaaat agtagagaag aaatcgatga aagtgaaagc gagtaaaaga 60  
 tgaggatatag agaatggcgg tcctaactgt aaggatccaa aggtagcgaa gtaaatagac 120  
 gtttgaaagg cgtccagtat gaaaggagaa acgagtgtag cactgtctag tcgtccaact 180  
 cagcgaaaca gcaataactg tgaaaatgca gtaactagc agtaggacgg aaagaaccca 240  
 taattcttga ctagatacgt ttacggaaga gagagaatca tgaagtagag gacgtggggt 300  
 aagagatgag agaccactgc atgaggataa agaatctaac tgagtaaaga aaat 354

<210> 2873  
 <211> 400  
 <212> DNA  
 <213> *Cyanidium caldarium*  
  
 <223> Clone ID: LIB190-056-Q1-E1-A12  
  
 <400> 2873  
  
 agcccaagcg tccgcccacg cgtccgattt catcgattgt ggtgagtgtt gtggttccgt 60  
 ggcgtcgtcg tgggggtggat tgtgtttgtt gtgtgtgtgt aaggaaaccc gatgcaaaac 120  
 gtgcaaaaga aaattgtaga tctttatgtt cctagaaaat gtgctgcttc taaccgaatt 180  
 atcacggcaa aggatcacgc ttctgttcag ttaactgtag cacaagtaga tgcgcaaggt 240  
 cgagtgcag gagaaacaac gacgtttgct ttgagtggat ttattagaac caagggatta 300  
 tcggatgcag cgggtcaacag gatatgtgaa gaaaaggac tgctcaacga ccttcattag 360  
 aacaactata aaacaacaat agcgtttttc ttttggatgt 400

<210> 2874  
 <211> 379  
 <212> DNA  
 <213> *Cyanidium caldarium*  
  
 <223> Clone ID: LIB190-056-Q1-E1-A3  
  
 <400> 2874

cccacgcgtc aggttttccg aagcattcag tctttatcgt caattgattg taactcttcc 60  
 atttgtctcc gtagtggacg attcgcaatg cagtctttgt atggaaatgc tgactacttg 120  
 tagagaatat atcgtcggac tgatgattcg taccaaacia acggaagcca aatccaaagg 180  
 agatttcgtc cgacagttgg aattggcagc gctcatgaag cactgtaata tgtcgattac 240  
 gcatcaacat ttggcattgc aagtagctat gaaattagct tattctacga agaactatcc 300  
 tttatgcgct gaaatttgcc gatcgattgt tggagttggc acccaatgaa gatatggaga 360  
 atactgccaa aaaagtga 379

<210> 2875  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-056-Q1-E1-A4  
 <400> 2875

atcgacggag cagaatattt aagaaatcat cccaacacct tcgatgtgat cataaccgat 60  
 tcttccgacc cagttgggcc agcagatgtc ttatttcaaa gaccttttta tcaaagtctc 120  
 catgccgcac tcaaaccgga tggcatttgt gcctgtcaag cagaaagtat gtggctacat 180  
 atggacctca tacgttcttt gatggaaact tgtcgaagta tttttgcttc cgtggcttat 240  
 gcttatacta tgattccttc ttatccagga ggacagattg gtttcgctat ttgctccaaa 300  
 tcggtacgtg atagcttgac gaagcctcta agagaaccaa atgcagttac aactcagtcg 360  
 ctgaaatatt actgtcctga gatacatgac gcggcatttg tattgccact ccttgcaaag 420  
 aga 423

<210> 2876  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-056-Q1-E1-A5  
 <400> 2876

accaatacta ttttttcttc aaaatttact tcgacacaaa gcctgaacga ttccaagacg 60  
 gcgcagtaat cttgttctcc acggtagctc gcctcgacag aaaaagacat gttgagctgg 120

ctacaaaaaa accacttgct agttgcaata ttacaagtgt caagaatggt tactctttat 180  
cgagtcacag tgcgtctttt cccctaattt ttctttttcg gtgtcgacga gtgcgtagac 240  
atgtcgtctt ggtaacgcaa cctctatttg acactctacg tttcctgtgc agcgtcgaac 300  
tacctaaaac gcaaagcagc aaagtcccaa agtttcgact ccttttggtt tctcc 355

<210> 2877  
<211> 418  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-A6

<400> 2877

agggcgctgg tatggattta ttaaaggatg aagttgatat gtccaaaaga gatgcttcgg 60  
gtaagtatat ttgcccaaaa ggagaacttt cctagacgac gccacttggt tcaggtaata 120  
tcaaaatgcc agatattgga ttgttcttga aagaccacat cagtgcgtgg tttaccgagc 180  
aagtacgaat ggaaataact ctcaagtata ttgatcctac ttatatgatt cgaagtatac 240  
ctgcaaatgc aagtgactgt ttgatgtgtg gtttattggc ccaatcagcc gtacatagtg 300  
ccatggctgg tcgagggtga gattttcttt ctttttggtt gtcacaggaa ttgttttttg 360  
taattgctga cgatatggat tctagtgggt ttacaattgg agttatcaat acccaata 418

<210> 2878  
<211> 423  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-A8

<400> 2878

acgatgacat ttctcaccaa aaaagatgtg gaacattggt tcgatgtgat atggtttagc 60  
atatttgata tccaatattc ttgtttatgt tctttgaatg ccttgaacca gatgtgtcga 120  
acctacagcg tgtctgtgcc ggctggcgat gactttgaat ttccaaactc tccttgctta 180  
agtgactggg atctcgttca ttttgtttcc catagcaacg aacctgtatt tcgtgtattt 240  
cacaagtgca tcatgtgctg ctttttagaa caaagaatac ttgtctttcg ggatggcctt 300  
tgtatactga acaattccaa cagctgggtg ttgttggtat ctttgctgta taccacaaa 360

tatgaaacgg acaaagaaaa cccgttcttc tagttctttg ccgtttgta agcgttgatg 420  
aat 423

<210> 2879  
<211> 427  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-A9

<400> 2879

agagttggtg aggagatagc aaagggttatg aaaatttttag tcagtgtaaa gcgtgttgtc 60  
gactatgctg ttaaagttcg agtaaaaccg gacgggtccg gaatagatct caacaatgtg 120  
aagatgtcaa tgaacccgtt ttgtgaaata gctgtagaag aagcggtagc tttaaaagag 180  
tcaaaagttg catcagaagt tggtgttgct actgtgggac cttctcaatc ttctgaacaa 240  
attcgtagtg cgtagctat ggggtgctgac cgaggcatac atgtgcaagt ggaacaggag 300  
ttgccgccat ccgtcgtttc aagagcttta aagggcattg tactaaacga gacaccaagt 360  
ctagtaatat tacgaaaaca agcgatagac gaccattgta accagactgg tcaaatgttg 420  
gggcaac 427

<210> 2880  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-B2

<400> 2880

accacgcgtc cggttggaag atatttatcg gatgggttaa aacaaaagaa atagccaaac 60  
tcagtagtaa tgagccagga ggatgaggac aaggacaaac ttacgcttca cttactagat 120  
tggttgtagc catatgcagc agtacaagaa gtgatcacia aacgtttggc tgacatcatc 180  
catttgctga gccgagaaaa gtttcacgct cgcgggtggg gagaaagact agatgtgctg 240  
ttgttggaac agcgacctca tccagcgact tgtaagtga ccccgaaacga aaagagttta 300  
aacgcttcaa cagattggcc tctttccacg aaccttttac agcatttctc gtggagtgtg 360  
attcacgaaa gcaaagaatc ggatttagaa gagttttgtt tatcaacgac 410

<210> 2881  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-B3

<400> 2881

accacgcgtc agcgatgatt cgatgcggca caagacagtt gtggtggcaa ctgcgcgctc 60  
 gttatcatat aactactact gtccatagag tagcaggaga agaagaaaag gaatcggctc 120  
 gtataaagcc caaacgtttg catcagcctc ttggagttta tccacaagga accaatctgg 180  
 aagaagtgag agaaaagtgg caaagtgacg ctatggaact tatctcgaaa gtacctccga 240  
 tagtagtcta tggctatgtc atagcgtgta atggaggcgg tgggccatta ggacatccaa 300  
 tagaatatat tcgtttggaa gcaccttata cttcaacttg caaatattgt ggtttgcat 360  
 atatcaacaa agacactttt gaaaagtgga aaaa 394

<210> 2882  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-B7

<400> 2882

cccacgcgtc cgaaaacggg aggagcgtc cgttcctcct gctgcagcaa catgggcaat 60  
 gacatggaag ccgagttgta atgacatgaa aattcggtta agtcagaaat cgaattggaa 120  
 cgaatcctgg aagtcgtttg atgaacttca ctggacgaag accaggatgg cggtggcatt 180  
 ctctgcgttc catctgtact actttcagtc tcacagctgt ttaaaactatc caaggaagat 240  
 ggatactggt caaacatttt cctttcagta gacattgcta ccttttccaa tccaccatgc 300  
 tcaggaattg aatgcacatc gccctattga tgtctattag ctaatatctt tgaattgcag 360  
 cttaagcaat accttgggaa tccatttgct agtttgacat tgctctaaa 409

<210> 2883  
 <211> 440  
 <212> DNA  
 <213> Cyanidium caldarium



<223> Clone ID: LIB190-056-Q1-E1-B8

<400> 2883

gggaataaaa ggtcgcaatg gaacagcaca acaactgaac agtcatgttt tttatcgtgt 60  
ccaatattgt tgagcacagc gttccacgag ttggttggtc aagtttctta tcccgaaagt 120  
atatacaaag tcctccgaag aaacgttgtc ctgttttagc gagtattttt caaagcttct 180  
tccctgcgga gagcaacact tccaaagtag tgcaactgga agcttgtaac atttctcacg 240  
acgcacagca agctgttttt gtggacaaca tggctggaga agcacgaacc ttagagaatg 300  
ttaaccttga aatactggag ggagagtttt tggtgctcat cggtgagaat ggctccggaa 360  
agagttcttt gttgaatatt ctggccggac tggacgtacc tgatcaaggg tatcccaa 420  
ggtatggcaa gaagatcaag 440

<210> 2884

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-C1

<400> 2884

accacgcgtc cgcccacgcg tccgcccacg cgtccggtcg attccaagta gcgatggcga 60  
aaagtgaacc gggggtgata tacataggtc acttaccgca tggtttttac gaaaaccaac 120  
taaagggctt tttctctcag tttggaaccg tgctgaaagt tcgagtggca agaagcataa 180  
aaacttatcg accaaagggg tatgcttttg tgatgttcgc gaaccgagaa gttgccgaaa 240  
ttgctttag agctatggac gggtatttca tgtataacaa aattttggtc tgtaaaatgg 300  
taccaccaga gaaagttcgc ccgaatatgt ttagaaagtt cgtgaagatt ccctggaaga 360  
agctagaaaa gaaccgccgt gctttgccgc tcac 394

<210> 2885

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-C2

<400> 2885

tgggttggttg gttgcgcca tggagcattc gatgaacaaa gtattggaac agctgtaggt 60  
 atagttttgt tgcaacatgg tgcacatatt cacttgaaaa aagggcaaag gagccaaaag 120  
 taaaaggata tcttggttacg gattgggaag ggctgtgtat tgcgtgtgag tttttttgta 180  
 ctggttggtta ctcacgtcac taaaggaaac tcgtagcaag ggggtgtggcc ccgtcgcagt 240  
 cttcaggttg gatcacaaga ttagctgaag cttcacttat gttgagaaac gatatgaaaa 300  
 gtgatgaaaa gcaaccacct ctcgttcaag tcgatttggg aaaatatgtt gtagcaataa 360  
 ggcctatgga aaatgtaata atgg 384

<210> 2886  
 <211> 283  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-056-Q1-E1-C3  
 <400> 2886

agtgattgga aagatagcca aagaaagcta ccaactggaa gtagttggtc tgacaaggta 60  
 gctcgttctg tgcctagttc tattgcacaa caacaaacga attcgggtacc tacggacaaa 120  
 agaaaggagt cagaacgagt ccattcttcc attggatttt gggactacat agatcagtct 180  
 ctggaaacaa aagagtcgaa gcctcccaaa aaggagccta cttcctcgac aaagcattcc 240  
 gttgacaaat acgaatcgct agacaagaac aagtcctttg gag 283

<210> 2887  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-056-Q1-E1-C5  
 <400> 2887

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 cctcagtgga acatgaaagc cttcctgagg aggaacaagc aactgtggat cctgacaaga 120  
 tgagtaagcg ctatagagca tcctggttta taactgctgt acttattgca gctgaaacgg 180  
 cttcttctgg aatgttatct cttccctctg cggtacaaac tctaggatat gttcccggaa 240  
 ctattctctt agtgtacttt ggagctgtgg ctacttatac aggttacttg attcacaagt 300

tctgtgagaa tcatagagaa gtaagacatt acgacgaagc agctggtatt gttcttggaa 360  
gagttggaag agaagtcata tatgctgggc aaattatcct ccttatttgt g 411

<210> 2888  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-C8

<400> 2888

accacgcgtc cggaaaggag ggtcgacgag ctcagcttga agaacaaaga acttgcgtagg 60  
ggttggacgt tatttatgaa cttggactct attgacacag gaattaatgc tccttttgac 120  
ccgtttgcag acgcctcacg tggagaggac gcagcagtaa ccaaaaatat agtgcataatt 180  
cgcttgcaac aaagaaacgg ccgcaagtgc ttgacgacga ttcaagggct tgacacaaaa 240  
ttggatttga ataaaattac aaaggccttc aaaaaggagt tttgttgcaa cggttgtgtc 300  
gtagacgacg cagaactggg aagagtcac ccaactgcaag gagaccagac ggataaagtc 360  
aaaaagtttc ctagttcagg agaaattagc tgaaaaagac ctgatagagg tgcacggtat 420  
atgagtgt 428

<210> 2889  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-D12

<400> 2889

agcgtttttg tgacaaggaa agataaatgg tcgtcaaaac agaaacctgt agtttttcag 60  
gtttccgcat ctaccccgga aaaggcactc gatttgtgcg cggggatggc aaactcctca 120  
tctttagtaa ccgcaagtgc aaatcctact ttcatatgcy taggagaccg gcagagttga 180  
attggactca gttgtatcga agaatgcaca aaaaaggaca gcaagaggag acacagaagc 240  
gacgtcgtag gcgcaaagtt gctgctgtac cgaaaccggt ggaaggcgcg tcgttggaag 300  
tgatcaaagc aaagagaacg caacgcccg aagtccgaaa aactgccaaa gaagcagcgt 360  
tgaaggaaat ttaaacaacg ccaagctgct gcggctggaa aaagaaaagg tggaagagga 420

gatgcgac

428

<210> 2890  
<211> 228  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-D2

<400> 2890

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tgcaaccagc gcaatgaatc gctgcggtca atgcaagctt cgaagcaaaa ccgctagagc 120  
attggccagg agatcgtctt ttcgtttcgg gaaacgcttg atacagaaat cgagagaata 180  
tccttgatgc caagtgaata aagcttatac caacaaaaaa caactaag 228

<210> 2891  
<211> 446  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-D4

<400> 2891

accacgcgtc cggatcatca aatagaggat caaaaagaca cagaacgtcg acagtatttt 60  
gcagttgaca agtatgagaa ctgtcaacta ttgtagactt cattttttat tagccatacg 120  
taggctccat caatatgttg atcaaagcaa gaggaaagta gtggttactg gagtcggcct 180  
ggtgacacct ctgagcgttg gtacgagtac tagttggaat agactgattg ctggtgagtg 240  
tgcaaggagc agaattcgag cttttgatgc gtcaaggttt cctgtacaga ttgctgccga 300  
cgttcctaga agcagttggg atggtttggg tccgtataga agagtgaatt gtaaagtttt 360  
gcacgatgag gagtattttg atgccacaag aatagtagcg ttttctgagg aagacaagag 420  
acagatacca gagtttatac agtttg 446

<210> 2892  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-D5

BB20130301

<400> 2892  
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tatgttcggt ggagtttttg tagccaactg ggagatttga gaatatttta caatagtttt 120  
gtgcagcatt tatccatata gccttctgga agtgtaagca tttcgaagca aatgcctcat 180  
ttcaaatata ttccaccatt caactctgca ataagtggag tttgtagttc cggaaggaa 240  
ttatactctt tgaatgcttg gaagtcattc tacgataagt atttgtccga agatgggata 300  
tttttcgctg attaagacag tgattatgga cctagtataa ttattcgagt gactggaaat 360  
tgcttatctt cttctgatga agagaactca tcttcagaac ttggggagtc ggaa 414

<210> 2893  
<211> 142  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-056-Q1-E1-D6

<400> 2893  
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aaaccataaa ggaagtaaaa gcgggaatct gagaggagga aagccacatt ggaactgaga 120  
aaaagggtcaa acaggagtgg ag 142

<210> 2894  
<211> 200  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-056-Q1-E1-D8

<400> 2894  
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gttgtcttga cattgttagc tgcgttcgaa agagctttga aaaaagttgg ctatctgcag 120  
tcgcagtgat ttgttgctct ttcattgtct caaagttgtg ttggagtaag tcgcgagcca 180  
taaaggtttg tttttataag 200

<210> 2895  
<211> 305

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-056-Q1-E1-E3  
 <400> 2895  
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 tatccgcagt tggatgaaac tctgcagac cgttcatttg tatttcaagg aggtgacagt 120  
 tattctgcaa aaggacagcc gtatccaatg gaaggactct attcttcata ctacggatca 180  
 ggcgatattc caaaagcatc cttaacggtt gcagattatt atccgtcttc caatccctat 240  
 ttgttgcat cggtccttc gatcgattat acgtagattg attgtaaatt aacacaagtt 300  
 gtgtg 305

<210> 2896  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-056-Q1-E1-E4  
 <400> 2896  
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 ctatgctatt cttgacagta aactgtttc tcatccgctg gaaatattcg aaaaaagtt 120  
 ttcttgagca aaagaacatc aagtcgaaac cttcagtagc tattatcgtg cccattagaa 180  
 ataggccatt tgaagagaag ttcataagag tctatttctc acagtatctt agccagttcc 240  
 aagagtactc ttatgaaatc atctttgcag aacaaattct ggatgactat cactttaaca 300  
 aacgattgct ttccaacgca gctttccttt ctttgaaaaa tcgtttctat gactgctatt 360  
 gtttgcaaga cgctgatact gtgccactta ccaacgagtt gttataaccgt tgtcct 416

<210> 2897  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-056-Q1-E1-E5  
 <400> 2897  
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tggaacgatg ccctatatta tcatggaaaa gtggtgaact tttgtgcata ttcgggttcg 120  
 tctgtttttg aaggtggcga ccatggcgca tgtaaatatg tgatggcttt ggcttctatc 180  
 agcttgattt tagttttctt tctttggttg gcctcctttg tcgacgcatt gtatccaatt 240  
 cttacaaagt tctggtttgt ggagcttggg atcaacatat tccttactat gtggtggttg 300  
 gttggtgcaa ttgtggtgac tgcaaagcga ccttctagtg ttgttatgga tgcgcttcac 360  
 ataacgaaag atatcaattc aatcgaaggc ctttcatgga tcaactttgc ttttacgcta 420  
 ttcctttgtg g 431

<210> 2898  
 <211> 311  
 <212> DNA  
 <213> *Cyanidium caldarium*  
 <223> Clone ID: LIB190-056-Q1-E1-E6  
 <400> 2898

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 cagtgagtat catggtgacg aaaacaacca aaaatatggt tcaagtattt ggaagaaaga 120  
 aaactgcggt tgcggtagcg acggttactg gttcgggaaa aggtctcatc cgagtcaacg 180  
 gcgttccttt ggagttggtg caaccggaaa ttttgcgcat caaagttttt gaaccatac 240  
 ttattcttgg tcaagacaag tttgcggaact tggatattcc gttaaagggtc aaaagtgggtg 300  
 gacacaccaa c 311

<210> 2899  
 <211> 445  
 <212> DNA  
 <213> *Cyanidium caldarium*  
 <223> Clone ID: LIB190-056-Q1-E1-E7  
 <400> 2899

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 gaggaaggag cgtgaaggaa ggaggaatcc caagtaatcg aggaagaaaa agcttcggtg 120  
 aaagcgtgaa cggattttgt acacactgcc cgtcaagttc tggaagtgtg ctaggaataa 180  
 gcaggagaag tagaagagag taggaaaagg aagtaaaagg agggaatgaa ggggaagttat 240





aaacgcccc aatgaacgtc cttgcacaag agagatgg 398

<210> 2902  
<211> 394  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-F5

<400> 2902

gaggaacaat gcacctcata ctgctgggtt ccagtacaga cctatgaaac ttatcaatgt 60  
tctcaagaga agaagaagga gtacagctat ccttgtcaaa cttatgagca ggtttcaact 120  
acttaccagt gtggtcagta cgagtcccaa caagtttact accaatgcca aaagtataag 180  
gagggttactc agcaagaatg ccagtacgtc caagagtcgt attgtgtcga gtatgaagaa 240  
tgtcagcaag ttaccagga agtttctcct tcagaaattg tctactacgg tgaatcttct 300  
tctagcagta cttacgacta ctagaacact tgtgaaatgc ccaaagtcgc aaagtacagt 360  
cgtctttttt gaagaaactg ttactttttg tccc 394

<210> 2903  
<211> 331  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-F8

<400> 2903

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cagtagtgga tgccgtagga ggagagatcg gtacagcctg ttgttcagct cttgcaaagg 120  
gaggactatt tcaaggttat ggattacaga gcggacttcc cattcaagtc agtaacagcg 180  
accttatattt caaagatatt gtgattagag gtttctgggtt ggcattgtgg tttcctaaac 240  
aatcaccttc tgtcgttcaa gaagttttcg atatgtttag gaagaaagaa cttgttccac 300  
atattcagaa gatatttcct cttgaagact a 331

<210> 2904  
<211> 189  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-G1

<400> 2904

aggacgcgtg agtggcaatt attgaaacaa gaggagcggg ctttggaatc caaatgaaac 60  
aaaaccgtat acaaacgtat tttatactac ttcttttaggt tgccaatgcc atggattatg 120  
tcgtttgtta ataccgtct tttctttcta gtttgttcgg agacaaccag gaattatctc 180  
cagtcgacg 189

<210> 2905

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-G8

<400> 2905

attcccgggc ccgaacacgc gtccatgttg acacaagaaa atgcctaaga aagctgttgg 60  
tattgacttg ggaacaactt actcttgtgt aggagtatgg atgaacgaaa gagttgaaat 120  
aattcctaatt gaccagggga acaggacgac tccttcctat gtggctttca ctgacgagga 180  
gcgcttaatt ggagacgcag ccaagaacca ggttgccctg aaccctcaaa atactgtatt 240  
tgacgcaaag cgccttattg gtcgaaagtt ttctgacctc tcggtgcaag cagatatgaa 300  
acattggccc ttcaaagtaa ttgccaagga tggagataaa ccccatatac aagtaaccta 360  
taaaggagag acaaagactt ttgcccctga agagatttct gcaatgggtc tgcagaagat 420  
gaaggaaaca gcggaagcgt atcttggttc tgctgt 456

<210> 2906

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-056-Q1-E1-H12

<400> 2906

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atgtctgacg atattgttgc cttgggttatt gacaatggct cgggtatggt gaaagcagga 120  
gttgacgggg acgatgctcc tcgttccgtc ttcccttcca tcgtaggtcg accaagacac 180

caagctatta tggttggtat gggacaaaag gaaagttatg tgggtgatga ggctcagtct 240  
cgaaggggta tactctctttt aaaataccca atagaacacg gtattgtcac taattgggat 300  
gatatggaaa agatatggca ccatactttc tacaatgaac ttcgaattgc acctgaagag 360  
catccagtcc tggtgaacga aacctcctct caatccaaag gcaaacaggg agaaaatgac 420  
tcagatcatg 430

<210> 2907  
<211> 433  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-057-Q1-E1-A10  
<400> 2907

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aaacaaacac tcatatatac atatacatat attttctata gatatagcta ttcttcaaata 120  
ggtttccaaa aagacgaaaa aatccactga gacagtctct tcaagattgg ctctcgttat 180  
gaaaagcgga aagaccacgt tgggcttgaa aagtacgttg aagagccttc gtcagggaaa 240  
aacaaaactc gtggtcttggt caaataactg tctcctctt gtgcgctcac agattgaata 300  
ttactgtcta ctgcgaagt gcaacgtaca ccactttcaa ggaataaca tagaactagg 360  
aaccgcttgt tggaaatact tccgttggtg ctgttttagga attttggacc ctggtgactc 420  
tgatattctc aag 433

<210> 2908  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-057-Q1-E1-A12  
<400> 2908

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ggagcgtgta aatatgtcat ggcgttggtg tctataagtt tgattctagt ctttttcttg 120  
tggcttttta catttgtaga tgcgttggtat cctattctta ccaagttttg gtttattgaa 180

ttgggtatca acgtgtttca aacaatgtgg tgggttggtg gagcaattgt tgtatctgca 240  
 aaaaggccta caagctctgt actanacgct ttaaacatta ctaaggatat taatgctatt 300  
 gaaggtccat cttggatcaa ctttgccttt agcctattcc tttgtggaat tgcaatagca 360  
 gatggtttgt tggttggttc aagaagtgca tgctcgggga accataatag tggaaatagt 420  
 aataatgc 428

<210> 2909  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-057-Q1-E1-A5  
 <400> 2909

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 gagcgcgga gatcacatgc gggtgggttc gttgttcagc gtggagagtg gaacttagcc 120  
 tcgggaatta cactgtgta gatggagttc tcggttcag gccgcacttt caggagcag 180  
 ttcgttctgc tggaacgtag cgagcaccgg acaggagcgg gggagcgtat cgaggaagct 240  
 tcaacgaagg ggaactggac aggggtgttc gtcacaaaca agtggggtgg tatcatctca 300  
 aactgtaggt aatcccaacg ctaacgatgg tatgggagag tcacgaatg ctgctgtttt 360  
 acaaactagt aacaacgaca atggaaaaga aacta 395

<210> 2910  
 <211> 384  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-057-Q1-E1-A9  
 <400> 2910

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 atctcaagtt tcaggtgctt caagatggaa aacctcaggt gataacttcg gatcaagtat 120  
 tcggaggaaa gaaagtacta ttgtttgggt tacctggtgc ctttactcca acctgctcta 180  
 ggcagcacct tccaggcttt ggacagaacg ttgatgaaat caaatcgaag gagtagata 240  
 cagtcgcttg tttagctgtc aatgaccctt ttgtattaca tcagtgggca gagtcacagg 300

gagtggcagg aaaaattccc atgttatcac atggtggtgc gcaatctgtc aagaaacttg 360  
gactggatat cgataccggt gacc 384

<210> 2911  
<211> 417  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-057-Q1-E1-B10  
  
<400> 2911

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tagcgccacc ctcagtagta tgtctagagc cagcttatgg ctcacaaggt tctttttgta 120  
cacagtcatt ctcgcctttt ctatcgccat agatggagtg atgggaaaaa agggcgacaa 180  
tgtttggaat acaacccttt tatacaatgg gaaagtcttc gacttttgcg catataaagc 240  
cagtgcgatg aaggcgatag agtataactt tatcggaac cgcctactt gcatgtatgt 300  
catcgctta gcgtcgacga gttcatcgt ctattttatc ctgtgggtgc ttaccattgt 360  
ggacgtcttt taccggttcc tgaacaaata ctggccggga gagttgttta ccaatat 417

<210> 2912  
<211> 74  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-057-Q1-E1-C1  
  
<400> 2912

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ggtcgttctg tggg 74

<210> 2913  
<211> 353  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-057-Q1-E1-C10  
  
<400> 2913

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agcgcttgtc attacctacg ctagtggacg agaccatgga tgccgatgaa agctttcata 120  
 tcgtgacgag cgaattttcc gaggatggta cacacacagc tatcgtcact ccacgtacac 180  
 aaatatccag tcgtgatata gatgcacgtg ttggtcgtcg aagaaatgaa acagtgagct 240  
 ttgacgacac cgtacctagc catgccttgc aacaagaaga aacagagact gtcgagtatc 300  
 aaggggatta tggaatggga tgcattgcgg acaatatgtt cggagccagt agg 353

<210> 2914  
 <211> 378  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-057-Q1-E1-C11  
 <400> 2914

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 cttatcacct tctgcctggc tatctattga tggtttcgga gtatatggac cagctgatgt 120  
 gttttaatat tagtgcttat ccagaaagta cgctccctgc ctacagtagc aacacttcac 180  
 gggaggatgg gggttttgga aactttaaac cttatacaag tcctattgca atgatacgct 240  
 cagcctctat gatgcttcgt cattctttgg atcaacctgc agcagcggat ctgttacaac 300  
 aagcactgca acgtaccatg gaagatattt cgaatagtga agtttctcac aatgggttcgt 360  
 ttttggaatc acgggcta 378

<210> 2915  
 <211> 425  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-057-Q1-E1-C12  
 <400> 2915

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 ctgggtattct tggccttcca gttacacttt atagctgtgg cttctttcct tttcttattg 120  
 tatttactct agtactattt gctcaagtat gcgtggtgtt tgcgtttgtt gaactactac 180  
 aacgaacaga cgcttccctt gtcaagttat ccaatgagtt gcgaccaatt agtgccatcg 240  
 ttctgaaca agtcgaatca accagtgaca gtgccgtgga ctcagaagtg acggaacgtg 300

cagagcattc ttcaacactg cacgacggta ttctgtagt agcaggttcg tgaaaactta 360  
 tttgtctgtt tttgctgatg ttgttaaaga atgccctgt tgcttccta ttactatga 420  
 gtgta 425

<210> 2916  
 <211> 444  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-057-Q1-E1-C6  
 <400> 2916

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 ggagtgcgtc cacgattgca gagcactttt ggcttgcgta gacttctgta gaattagact 120  
 cgacacttgt ttatgttgta ctttgagtan atgagagctg tgattgaacg tgtcagccaa 180  
 gcgtccgtaa ctggaggagg aaaggctcgt tccattcaag agggtaggaa ggtgagacag 240  
 ggtttttagga gtaaagagta tggagtgccg ggtctctgca tgcgtttggg cagcgtgcg 300  
 cgaagacacg gtaaggagga tcggttggtg tttatttttg atattttcgg gcacgctccg 360  
 ttaggaggaa gatcttgaat acatgtaagt atttgggctc atgtttcgac ctacataat 420  
 gtctcgtagg tgttcaaaag acac 444

<210> 2917  
 <211> 304  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-057-Q1-E1-D10  
 <400> 2917

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 aaacaagagt ccgctctagt tgactctgtg gaggatggaa agcacgtcgg cagccatgaa 120  
 gaggttttca atggcgccct tcccaagttg aggttatcgc aagccccag tagcgtggat 180  
 agtacgaaga aatcggagtc aggacaggtt tatctgcctt atgaaagaga taattggacc 240  
 gagtcagagt cttccaacgt tggacacgtt cctgaactct cacaccacct gggttggaga 300  
 cacc 304

<210> 2918  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-D12

<400> 2918

gacccaagcg taaggtaaag gggttgggtg aagatggcac aaccttcctc tgacgagatc 60  
 ttcaagaagc ctccgaaaga ctgttcgcaa gattactgtg acccttatga attctatgaa 120  
 tatcaaagat atttggaaag agagtataaa gtcaagtccg aagagtttat atatataaag 180  
 gacaaagtca aggagtgtta ttatcgtgaa ggggtcgctc actataagaa ttgccgtgaa 240  
 cttgttgatc agtattggaa aaagctccgc gaagtacgcc gtttctatca tgatcaccca 300  
 aggattatac ctggaaagga atatattcct gttccgaagc caaggaagtc agaagaactg 360  
 ctggatagtg cggatgtaga actgaaaaac gtagcagtga catcagcttg gatgaacctc 420  
 agtcctaac 429

<210> 2919  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-E10

<400> 2919

gacccaagcg taagcccacg cgtccgcca cgcgtccgaa tttgcaaata tttgctatct 60  
 ttagcagtag tgttatttgt atctgttcatt attgctcgag cacaatgctc ggaagagact 120  
 atcaaacaaa tggaggcaat atttatacaa aactttacac aaaatgaagc aatggctcct 180  
 atgtgcttac attctgcctt tcatgactgc tggaatgggt gtaacggagc attgttttta 240  
 ccagaagaaa tagacagacc tgagaacgct ggtttacctc cgctgaaacc actgctgatg 300  
 ccatttactt cacagtttcc ttgtatcagt attgcagact tgatcaactc ttgtgcgggt 360  
 actgctctga agtttttggg tgggccaat tgtccaagtg tactagggaa gactcgacag 420  
 aggtgtt 427



<210> 2920  
 <211> 434  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-E11

<400> 2920

ccggctcgac ccaagcgtaa gacaacgtgc ctttttgag aggccattgt tgagttggga 60  
 gacacaagtt tggcagtga gacttgtgaa gagttattta ctgtcgatcc tccgcacata 120  
 aaatatgtct taaatggggg tgaaataatt gcaaacggct caggatctca tcaccatctt 180  
 cgaaaacttg accaacgctt agatttgata cgtggagcta cttgtaaggg aggtggagtt 240  
 tatttatatg ccaatcaact tggatgtgat ggaggaaggt tatattttga tggatgtgct 300  
 tgtatttgtg tcaatgggtga aatagttgct caaggatctc agttttctgt ggagactgaa 360  
 gtggaagtga ttgttggcac tgtagatttg gacaaagtga ctagtcacg tgttggagtt 420  
 gcctcacgag gttt 434

<210> 2921  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-E12

<400> 2921

gacccaagcg taagcccacg cgtccggttg gttggtttcg tcgcttcggt ctttcttttg 60  
 tgattctcgt gtattgcacg agaaaaagtc cttaagatgg aaagagcttt gaaaagcagt 120  
 gcacgtcttg tgcccatacg tccaaagcct gttgtacctt caaaagggtc tgaaactttt 180  
 tcgttgcacg tagttggtgc cacgtgggat ggtggttgca cgtactatat aaggggagga 240  
 gggtcacata ttactaatgg gagaattaca gtaccttcaa gggcgtctaa tcccatgacc 300  
 aaggacgagt tcttcttact gggacttac tcgagagaca agcttttgcc gctgtttgat 360  
 acaactctac aaagtccga aacacaatta tgtgggttac tttgggtgt attttcacag 420  
 ttgtttt 427

<210> 2922  
 <211> 430

<212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-057-Q1-E1-E8  
  
 <400> 2922  
  
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 tgcgtgggggt tggacgttat ttatgaactt ggactcgatt gacacagga ttaaggctcc 120  
 ttttgacccg tttgcagacg cctcacgtgg agaggacgca ggagtagcga ggggtgtagt 180  
 ggatattcgc ttgcaacaaa ggaacggccg caagtgttc ggggagcagt caagggcgtg 240  
 agacaaaagg gcggttgat aaatgtgcga aggccgtcaa aaggagttt tggtgcaacg 300  
 gtggtgtcgt agacgacgga ggggggggaa gagtcacga actgcaagga cgagagaggg 360  
 ataaagtcaa aaagtttcta gttcaggaga aattagctgg aaaggagctg ataaaggtgc 420  
 acggtatatg 430

<210> 2923  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-057-Q1-E1-E9  
  
 <400> 2923

gacccaagcg taagcccacg cgtccgagaa agaggaaagg ttacgagag aaggaagtag 60  
 aaagaagaga gtgtaaggcg gcgtcataat agaaatccga aaggagtaga agaaaagaga 120  
 gagaagaaag aaaagaagag aaaagccgta ctgaagaccg acacaggtac tcgaggagaa 180  
 aggagacca aattaagggtg agagaatgga cgataaggaa ctaggcaaaa ggatatggta 240  
 tctgcggtag aacatatgaa agaagcagca ccgactgttt agcaaaaaca cagcactctg 300  
 cagaaaagag aaaatgtaaa gtatagagtg tgcggcctgc caaatagtag agaagaaatc 360  
 gatgaaagtg aaagcgagta aaagatgacg tatagagaat ggcggtccta acagtaagga 420  
 tcca 424

<210> 2924  
 <211> 424  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-F10

<400> 2924

gacccaagcg tcagcccacg cgcccgacaa tggcttattt gttgtcatag tatagaaaat 60  
acaacaaaat gatgggactt gtccgttggt agtggaaatt ttccgtttca tgactagatt 120  
tggctttgtg ataggaccga acttctgttt tcaacggaaa cgtgcagctg acttgctgaa 180  
agaaaagagg cggctgtggt ctttcccga taggacagct tgtcatggag gtgttattat 240  
gagtcgatcc aacgaaagg taaccaagac tagtgtggaa cactttttgt caatggccgc 300  
gaaaaagctt cgtgaagtct ttggatattc ccactttcct tctggccaag aagacgtttt 360  
gcaaaaacta cttttgcctc ggtagttgct ttgggacttg ttaccaactg gtggtggaaa 420  
aagt 424

<210> 2925

<211> 357

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-F11

<400> 2925

gacccaagcg tcagcccacg cgcccgggct tttgtattcg aatctcgaaa cggactagaa 60  
gaaacataag aactgaaaa taaagcaaag ggtttgtagg taaaaggct ttcgtatcga 120  
cgtgactaca gacaatttcg tacaagaggc gcgatggtag atcaagtatc ttcaccaca 180  
ccagactcgg agcacgtgtg gtataaaagt tatcaagggtg aacaggactt gtgttacatt 240  
cgagcactta ttgacaacga cttgtctgaa cccactcca tttttactta tacacacttc 300  
ctcaatcact ggtcacactc acgtctccta cgctcttttc caagtgaatg tactggg 357

<210> 2926

<211> 367

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-F6

<400> 2926

gcaaagaact cgattacttc ggaagttgta gattcctcgc ctaggcggat cgttgcaaga 60  
gcaagcgtca actcctcggg agaaagaaag tttcgtcatg gaaagttcct acttgaaaaa 120  
atagaatcgg gctcttttca ctccaacagg gggaagccgg acttggtgcg gcctagggcg 180  
gtgaagagga gaggcgggtg aagaacagcg gcgggagggg cgtttccggg cgcaagactt 240  
tattcctggg gaaggaaaaa gtgcaacgca gattgccccg gagggctact tgggttgat 300  
caaccacaa gaggcacttc cgagaggcgt gtgaggtgac caatacaagt gtgaagattt 360  
taatggc 367

<210> 2927  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-057-Q1-E1-F9  
<400> 2927

agcccacgcg tccggccttt aaaagcgctg cacgctgggt gttgagatac aggtttgtgg 60  
attggtgaaa aagaaaagt gtttgaggac caaacagagt gacaagaaga gatggcaagg 120  
agaatattgg gtgcttatat gggagatgcc acagtggcaa ctctgttcag tatcaaaatg 180  
ttgttctatc ttactatcat gggtttctcc ataactatct tggctctcat gggaaagaac 240  
tcggatggta tttggataca tagtgtgcca cctgcagatc aatattgtgc atacaagtct 300  
tcattggagg tgaaccacca tggaattgct tcctattgca agtatatcct tgccgtacct 360  
gctattgggt tggttatctc gtctttccag ttttgctacc gtctgttggg t 411

<210> 2928  
<211> 429  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-057-Q1-E1-G11  
<400> 2928

gaccaagcg tcagcccacg cgtccggcga ggagagacga gattgttgtt gttgttgttg 60  
tttggttggg tagttggtgg gaaagccaac cacagtgcaa gtattgttgc agatatatac 120  
actagtagaa taattgttga ggtgcaccag tgtgtttgtg gggtaaaaa tattacgaga 180

aacgaacaag atgtggtggt atgtagaagc ttcatttcca acccataatc atcacaatgc 240  
 taataataat aatatacatt gtattcataa gagaggagtt gcttgcaagt atgtaaacia 300  
 gttggttgcc ataagtttta ctaggtcgaa tcgttgccctc aactggagca acgataccaa 360  
 agcaagaata accactacta ctactactgc agtaccctgc ggaaaagaga gcagccgacc 420  
 ttgttcttt 429

<210> 2929  
 <211> 328  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-057-Q1-E1-G5  
 <400> 2929

tggtgaaaga acttagatcg agagcagact ttgaccaggc tagtcaagca gacaagttcg 60  
 tgccgctgga cttttatggc acttggtgcg ggccttgcta gaaggagttc tccctagctg 120  
 gaagaactgt ctgctgacct tactttaaat ggggagagcg ggtagctgtt tctacgcagg 180  
 tatgaggtgg agagattggc agatgttgcg caagaagttg gggattaccg cgatgccagc 240  
 ttttatttgt tagagaagag gaaagaaagt cgaagaactc gtcggtgcgt cgaggaccgg 300  
 ttaaaacata tgattgagaa gaacgctt 328

<210> 2930  
 <211> 385  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-057-Q1-E1-G6  
 <400> 2930

acgatggcca gcgtgaccc gtcacaattg tacctgggac tcgtttgtat gagtgggttc 60  
 gacaggagga aatcttgggg aagtctgagc atcaccaagg aatcagagac ctcggaagac 120  
 tgggagctcc tatggcattt gctcctgatg gagggattga aggttactat tggggcgcgga 180  
 cttaggatcc caggggaagg aattttcttg taggtgggag gtgtcatcca gaggagtgca 240  
 gtgcgcgcat atgagatcgt tcttgctcgg agaggcgacg gtcagtatga ttagccagga 300  
 tgtgcgggag tatatgagac atttagtgct gcagtgcagg cttttgcttc aaaagaagcg 360

ggtgattcgg gtccttctac aaaga

385

<210> 2931  
<211> 425  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-G9

<400> 2931

gaccaagcg tcagatttct gccaccatag aaatttcgaa accgtcgttt cattttgtgg 60  
cttgcttttc ttttctttca agaatgagca agactttgga ctcaattgac gattttcggg 120  
ttgaagcagg tgttacacct ttctctcct tttggattcc ctgtgttacc tgtgttcttt 180  
attttacgct cactagagtt ttcaagttgt tggtttcgaa tcgaaaaccc cttcgttccc 240  
cttcattact gtttttttac aatggctgtt taagtttctt ctcttttatt ctctttattg 300  
ctcttggtgc agttattttt gaaaagtcca aactctatac ccctcatgag ttggtttgtg 360  
gctccgctac ccacatgat ggccgcctcc agtttagctt attggctaaa ttaccttttc 420  
aaata 425

<210> 2932  
<211> 439  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-H10

<400> 2932

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tggaacaaa aactggaaga aacttataaa catttggaag gtttattgaa gaaaaccgaa 120  
gagatggaac agaaatgggc cagatatagc ttgtcgcagt tttcaacgga agatctcgta 180  
agagaactcg aaaaaagaat gggatgggca caaggagata ttccgatgtc tgatgagaaa 240  
aagagattag tattcatagg tcctcctgga agtggaagaa gaactcaagc accaaaagta 300  
actcagaaat attgtttatg tcatttggca acaggagata tggtgagagc tgctgtatct 360  
gcacgaacag gatttaggga aagaagcaaa gaaagttatg gacgccggtg gtctcgtatc 420  
ggatgaaatt gtggtttct 439

<210> 2933  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-H11

<400> 2933

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 aagagactac tgaaaaaaaa atcatgcaaa aaaatcaacc cgttcacgca acatagctgt 120  
 tttgatgtag ttgcagttgc ccattgttat agaacgagca gagttggagt ttgagatgaa 180  
 gtagtcgttg ctcaagcgaa acatagttga ctggcatcga gatgacgcac tagtgatagt 240  
 ttcttccaat cgcaggtgga atagggtttc cttgtagagg ctgacttgtg gactgcgaga 300  
 ttagtggtgga taaagctcat aggaagaaaa ttccacgtgc ttcaagtttt cgtcttgaac 360  
 tggtgaaaaa taatggttta cttggtgaag ttgctatagc gtagaaaggt agccaacgag 420

<210> 2934  
 <211> 322  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-H12

<400> 2934

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 gtcccgtat gatcgtgcca ttacggtctt ttccccagat ggacacttat ttcaagtaga 120  
 agatgccttg gaagcagtac gaaaaggaac aactgccgtt ggagttcgag ggaagaacgt 180  
 catcgtcctg gcaatggaga agaagagcat tgcaaaactc caagaagcac gaactgtggc 240  
 gtaaaatgtg tctattacat aagcatatat gtctgtcttt tgccagggtg acagcggatg 300  
 ctcgagttct ggtgaaatcg tg 322

<210> 2935  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-057-Q1-E1-H2

<400> 2935

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tgcagagtgg aattggatat cgacggctat tatggggaac aaaataggaa ggcgtgcacg 120  
tactttgacg gacgtgtcag caccagacgt cagtgcgaagt tgggcaaatt ttttgggacg 180  
caccggaaac gtggaactgc cagcatgggt ggattatgtg aggcgggagt gcgacgaacg 240  
aactagctcc agatgggtcca gactggcgcg gcctgagaat ggcagctcgc gcgcggcaaa 300  
tctgtagtcg gtccaggtag aggtgggggt gcattccgac gggatacagg tgctcgggag 360  
agaaggggat cgaagcctan tcacttcccg ttg 393

<210> 2936

<211> 266

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-057-Q1-E1-H8

<400> 2936

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gggtgggcgtc gtcgtcgtcg ctgctgtaga cgcgcttcc aagccttgag gacaaaagtc 120  
catccgcaat cgacgcaagt cttcattggg gacaacgtga cgaactaccg atacccattt 180  
taggcgaaga aatagaattg cgctgttgct acctacttct tgcaggctct aggtgcaacg 240  
ctccgagagc tggatgagct cttcta 266

<210> 2937

<211> 329

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-A1

<400> 2937

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aacgtacgag aaagccaagt gaggaaacga aggcaagtac atggcggacc gagaaaggac 120  
agggcgtaag acgtgatata gactaggaag aacagataac agagctataa aggacgtcaa 180  
agaagagtac cacgactaga agaggtagcg aattcacgaa gaaagaacgt gaaagaatga 240



ggaatccac gtgaggaaaa caacgcaact agagggcggc ccgagaaagt agaagagcat 300  
gaaaagaaga gagaatgctg ggtggaata 329

<210> 2938  
<211> 413  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-058-Q1-E1-A10  
  
<400> 2938

agcaagagcg ttcctcagta cgggaagaag agactttggt attaggtacc agaagtcctc 60  
gaagtaattc agatattgag aatggttaga gtatctatat aaagtatata tttgctcaag 120  
tatgaacgat taggaggtgt gtctttgagt accaccagcc ttgacaagaa ggaagaaacc 180  
aaaaaaggcg ggaaaaagga agaacaagga aagaagaaga aagatgacga cctaaaaact 240  
catatggcga acgaacgaac tttcttcaag tggttattta caggttttca tattggagct 300  
atgggtactt ttattctggc attcttttca gagtctcgag atcctttcaa gttgttattg 360  
gttatctttt gttggttgat tgccttgagc tttgtgtttt atggattata caa 413

<210> 2939  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-058-Q1-E1-A12  
  
<400> 2939

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atggataccg gaaaccctta tacttctgta ggcgtaagga gtacaaccg agcaaaaacc 120  
agcgaatcaa agaaaaatg gaaaaagatt ctgccttata tcggaggtgt agttattcta 180  
ggattggtgg ttggtttggc caaagcaaag cagcagcaag atacgggtga caagaagaag 240  
acggcagtag caaaagaata aacgaagcga gacattgaaa cgctgtcgaa tggttatgaa 300  
agggtgatat cgtgttggtg gttcttattg ggtagtttgt tttttcgat ggattaaaag 360  
aaagatagac ttgtgtctgt gattctattt gccaaaagaa aaatgctttt 410

<210> 2940  
 <211> 365  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-058-Q1-E1-A2  
  
 <400> 2940  
  
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 aagtttcagg tgcttcaaga tggaaaaccc caggtgataa ctccggatca agtattcgga 120  
 ggaaagaaag tagtattggt tgggttacct ggtgccttta ctccaacctg ctctaggcag 180  
 caccttccag gctttggaca gaagggtgat gaaatcaa at cgaaaggagt agatacagtc 240  
 gcttggttag ctgtcaatga cccttttgta ttacatcagt gggcagagtc acagggagt 300  
 gcaggaaaaa ttctcatggt agcagatggt ggtgcgcaat ctgtcaagaa acttggactg 360  
 gatat 365

<210> 2941  
 <211> 330  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-058-Q1-E1-A3  
  
 <400> 2941  
  
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 tatcaggaag aaaagaggga gtagatgagg aaagaaagat caaggaagta agagtaacag 120  
 aaggagtaat gtgaatgaaa gcaggaaagt atttgaagaa gagagtgtaa agcgcgtagc 180  
 ttttgcataa tgtcccagcg agtgaaagag gaagcatcaa gacagaaaga gaagtagcca 240  
 ggtaagaccc gaagctagtt gacatctatgc tgtccaaacg aagtaacgct gaaccagtat 300  
 ctgtgggaaa aagattcgga agagatggca 330

<210> 2942  
 <211> 354  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-058-Q1-E1-A8  
  
 <400> 2942

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 aaaaggaact tcgagttttg gtaagagaaa taacaaaact cacgttttat gtatacgctg 120  
 tgggcgaagg gcgtaccatc tacagaagaa gcgttggtgt tcttggtggg acccatctgc 180  
 taaaaagaga aaattcaact ggtcggaaaa gtcgaaaaga aggcgaacga caggcactgg 240  
 tcgaatgcgg tatttgagac acctaccgcg acgattcaaa aatggtttta gagaagggtg 300  
 caaggcttct tctaaacgtc ctgctccagc accttcagca gtataataat tgac 354

<210> 2943  
 <211> 383  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-058-Q1-E1-B1  
 <400> 2943

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 aaggtttacg agagaaggaa gtagaaagaa gagagtgtaa ggcggcgtca taatagaaat 120  
 ccgaaaggag tagaagaaaa gagagagaag aaagaaaaga agagaaaagc cgtactgaag 180  
 accgacacag gtactcgagg agaaaggaga cccaaattaa ggtgagagaa tggacgataa 240  
 ggaactaggc aaaaggatat ggtatctgcg gtagaacata tgaaagaagc agcaccgact 300  
 gtttagcana aacacagcac tctgcagaaa agagaaaatg taaagtatag agtgtgcggc 360  
 ctgccaaata gtagagaaga aat 383

<210> 2944  
 <211> 337  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-B10  
 <400> 2944

cggacgcgtg ggttttttga tttcgacgat tggcagtagc agcagcaaca tgagccgtcc 60  
 agaatacttg gcgcctcctg aaatatatta caacgatcag gaagctaaaa aatatttaac 120  
 aagcacacga atgaacgaaa tccaaagaag cctcactgaa agagcgttgg aactgctgtg 180

tcttcctgct gaccaaaagt gcttattgct cgacttgggc tgtggctcag gtctaagtgg 240  
 tgatgttatt acagaaaatg ggcacgaatg ggtaggtttt gatatatctc aagctatgtt 300  
 ggatgcagct tgcaccagag acgttgaacg tgatttg 337

<210> 2945  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-B6

<400> 2945

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 ttgagactag tacaggaagg agacttgaat actttgacca ttcgtaaagt aaaggaactt 120  
 gttaaacaac aaattagtgt tgaagactcc tatgacgacc aactcaccga gctcgtgaaa 180  
 gttgctatcg atagacacat taccagtttg caacaacaaa gcatagaaga tgactcaacc 240  
 aagaacacaa agaaagatac acaacaacga aacaaaccac acaacacgaa agaaatagac 300  
 actagtctaa ctgaccaaga agtgtatcat caatttgaca agtacgtcg tcaat 355

<210> 2946  
 <211> 255  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-B9

<400> 2946

cgcgctccgc cagcgctccg cccacgcgtt cggaataaaa aaaaaaggag acaaagctta 60  
 agtcgcatta aacagccctt tgaaacaatt tttgtcgtca caattagggg gggttctcct 120  
 cgggttttaa ctctctaata tttttgtttt gaattaaaac acctcaaaa ttttcccaa 180  
 atttaattta acgggcgtcc ttttaaaagc tcttgaatgg gaaatacctt gaggtgaaca 240  
 accttaacgc ctttg 255

<210> 2947  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-C11

<400> 2947

agaagaactc atcgagagaa tatggtcgta tgtagaagag cacaaggaaa cgcataatgg 60  
agggcgcttt ttggtacaag agctgtgtag tgttttctcg ggagatgatg tattatgcca 120  
tcgagcattg tatgttttgg ttcaacagga gaaagcagtt gtatatgaaa tagaaaaaga 180  
tgtttttggg gttaaatttg gtcctgatct ttctatgaaa gcgtttgata agaataatttt 240  
ttcgatgatg catcaaattt cagcactgga aaagcacatt gataatttga atcaaaagtt 300  
gtctgaaatg gaagaaagac taaaagtttg tgcagaaaag ttgagaaaat acaagtcttc 360  
acagaatgag ctctatatga ttgagcg 387

<210> 2948

<211> 347

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-C12

<400> 2948

agcccacgcg tccgctcatg ggagaaagct ctagtgaatt gaaggtggca gaaacttggg 60  
acagaacctt ggaacttggg attaagagag ttgcatatgg agtacttgta ggctcagtaa 120  
ctgctttgat cttattccgt tctcccttga cgagagttgc tgtttcgagt tttggaggtg 180  
gtgtaggggt tggaaatgact tatagtgaag caaaacggga ttttgaaaaa ctcaaacctg 240  
cagtctcttc tcagggattg accgaggact tgtctatgaa tagttgatga ggtggtggcg 300  
gcggtggtcg tcgtgaataa aagaatactc gttgttctcc tttgaaa 347

<210> 2949

<211> 358

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-C6

<400> 2949

agcaatgacg ctcattaaaa gtgtggatgc tcgagagatt ctagactcga gaggaaatcc 60  
gacagttgaa gttcaagtca ctactgaact aggtgttact cgtgcagctg ttccttctgg 120

tgcttcaaca ggagttcacg aagctcacga gttgagagat aacgacaagt cgaggtttct 180  
 aggaaaggga gttacaaagg cagtacaaaa tgtgaagacc gaacttgcaa aagctgtgat 240  
 tggatggat tgtcgggacc aggcagcgat tgatcgcaag atgatctctt tggatggaac 300  
 tccaaataaa agtagactgg gggctaatagc tataacttga gtttccatgg ctgtttgt 358

<210> 2950  
 <211> 368  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-C8  
 <400> 2950

agcccacgcg tccgtcactg cagacgctgg tgccgaggac gctactccta ttcaagcagg 60  
 ctccgtaaag aagaattctt ttgtagtgtt gaaaggtttt ccgtgcaaag tggtagacat 120  
 atccacctca aagacaggga agcatggcca cgcaaaagcc aacatagtag gtattgatat 180  
 cttcactggc aagaaatacg aagaaatgtg tcccacctcc cacaacattc tgcagccggt 240  
 ggtaaccgc aaagactatc agttggtaga tattgaggac gatgggtttg tagttcttat 300  
 ggatgaaaac aacgagacga gatcagacct gaaacttgat ttggagaatg atgaagtaca 360  
 caagaaga 368

<210> 2951  
 <211> 378  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-D1  
 <400> 2951

cccacgcgtc cgcccacgcg tccggtcctt gaaaagatat agagacatat ttatgtatgt 60  
 aaactctccc tcttgtcct cgtcgactgg aacgagcctt tccaacgctc cttgtgctaa 120  
 tactttgcat caaggacaag agagtgactt gcaaagcatc gtcgcaagca aacgctatga 180  
 aagatatgtg agcaactcag aatgcccaca aaactttttt cttgtttatc ttcgaaacag 240  
 atgacctatt tttttgattt ccaactcgtc gttgaaaagt gaacggggct taaggctttc 300  
 tgttcgccga caagaatatt tgaagatacg aatttgtcgg tttaatgttg tcaatattta 360

ttgcttcagc aaatcat

378

<210> 2952  
<211> 360  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-D2

<400> 2952

agccacgcg tccgcccacg cgtccggttg caagaggtgg ttttcgaagc atgatcggtg 60  
tatgcaccga agaagacgaa gaaaccaaag tgctcaagga caaggtggaa ctgattcaag 120  
ttcctgaaac agtggattgt cttcaaaatt tactcaatat tattccattc caacttttaa 180  
gttatcactt ggcagtgcga agaggtcaca atgtggacca acctcgaaat ttagccaaat 240  
cggttaccgt cgaataaatg gcgaattgtt ccatgtggag gaggtttggt tttttgtggc 300  
ttgggtcaac ccttgaacga aaaatatctg gttcatttat taaaagtatt ggtaacaatc 360

<210> 2953  
<211> 366  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-058-Q1-E1-D3

<400> 2953

aggtaaagcg attttttggg aaaagatgat ttcaagtcgc gatgatcgtg atcaagatgt 60  
gtactggaaa tatttggagt ttgcgaccg ccacaaagtt gaatatgacc caaccgtttg 120  
tatgtctttg tacgtacaaa ctggttctct acagttttca aggaaatcgg aaggtcaaca 180  
agttattcct ctgttggaat tagcgaaaga aggacacctt tcatgggtgg aggaactttc 240  
atacaattgc cgtcgtttat cttctctcgt ttcaaccttg ttggtcaagt tgtgtgaggc 300  
actgcctcag ttgaagatgc tgaatctgtc tggaacgtnt cttggtgacg aaaattttgt 360  
tgact 366

<210> 2954  
<211> 357  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-D6

<400> 2954

agcttctacc agaacagcag tatgtgaaaa acaaagggaa accaagagga agagtttgca 60  
aggaatcaac ggaagagaaa catccgacga gacacaagtt gaatcatgca aaaccacgag 120  
ataaggagat tttggaagaa gaggaaatct tcaatttact agaagctttt agaaagtatt 180  
ttccagaacc accgagcaac ttgagagctc aggagataat tgaagtaggt atttgcattcc 240  
cttggctttt gaataattca caggaaaacg agtaggtctg gtaggttctt tacggagaaa 300  
gaacagtggg agctgtggga aaacgttttg aagccttgga gtcgaaaatg gtactca 357

<210> 2955

<211> 389

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-D7

<400> 2955

agcccacgcg tccgcgacg cgtggggccg ccactacggc tactagccaa tattctagtt 60  
tattaacctt tctaagaatt ggtgcctttg tgtttggtgt agctgcaggt tttggaagtg 120  
cttcagcggg ccatcgtaaa agagaaaaaa ttttaatttc taaaattcac gagcgcaatg 180  
ccaaaattga ggcgttgga agtgaactaa agcaactgaa aggggaaatt ccagcttcta 240  
caggtgatcc agttcaagat tggttgaatc aattggaata agatgtatat gttacaagtg 300  
ccttgtggaa gagagagata gtcatttgaa taaaattagt tcttttccca acaaaaataa 360  
atgggacact cctaaaaaaa aagggccgg 389

<210> 2956

<211> 354

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-D8

<400> 2956

cgaccacga cgtaagatcc aatatgagta aacgcaacaa ctactttgag ttgcttaccg 60  
ctcgtcaact actgcccagg ggtggattcc ataccgtta cagtcaaac aacggacctt 120



cgcggaaccc tgacaaatac gacaaaatcc tatgtttcca tcgaaccata cggaagcttc 180  
 tttaccactt cccgaattct gcgtaaactt aaatttgaga gactaagact ctgctttctt 240  
 cacactcaag acaaccaggt tgcgaaacca gggtaacctt gacgagcgcac tcgttagtct 300  
 ctcaccaccc ctctgtcta cgtgcttgaa acgtgtgcct ctgccgccct tcgt 354

<210> 2957  
 <211> 397  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-D9  
 <400> 2957

cccacgcgtc cgcccacgcg tccgacaagt tattcaacaa aaatatggga cttgtgggct 60  
 tcttccaaag aacactattg tcaggcaaac acaaggatat atatccattg gttggttgcg 120  
 tctctctttc tcttattatg gcaacattct tatccgttga ctaactgctc cacaatccaa 180  
 ctgtattatg gaaaaagtct gaacgcgagg cctttgctcg taacgaattg gagaataaag 240  
 aacgatggtc tattcgggtc cttaagcaat ttcgagacca ccctattacg gtgttcaaat 300  
 cactggaatt ccatacgcag agcaaggaat aaggatcatc tgtaaataaa tgtccatctc 360  
 tgttgtgttt tcataacgat gcaatgtctc tcacttc 397

<210> 2958  
 <211> 367  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-E1  
 <400> 2958

tcacgttcct agttgcaata atcggctctg taatatcgtc tgccactcct ctaagtgaag 60  
 gatggcaaag ttctacctcc tgccaagaga catgtaagac agtctgtatt caaacgcaga 120  
 tatgttcaac tccaacacct acaccaactc caagtgtttc tgcgcaacaa ggaaacgtat 180  
 accgctggag tgagacgtat gcaactccta ctccaacacc aactcttggt tgtacttatg 240  
 ttccgcagtg cactcaagtt tgcagcagca aatgcccag tcagacaact tctgccgtag 300  
 aaagcaacag ttatacctcc tcttctactc aatcgtctac cacatcaaca tactattatg 360

gtgctgg

367

<210> 2959  
<211> 276  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-058-Q1-E1-E10  
  
<400> 2959

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ttccaatgta catgagcacg actttttctt ttgacaagag ggacgatgct atgccatgca 120  
gacatatgaa tatatataga tatacaccta tgcatatgta catatatgca tatatatatg 180  
tatgtatcca gatttataga gataatacat gggatccata gagatagata gtttgtacag 240  
ataaaggatc gatagaaatt tggcgcaaaa cccagc 276

<210> 2960  
<211> 341  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-058-Q1-E1-E11  
  
<400> 2960

gacccacgag tcagcccacg cgtccgcccc cgcgtccggg agagtctttt atggtagcaa 60  
ctatttggtc tctgtttcgt tcagctggac ttggcgctcat cgtgtttgag gcctttctac 120  
ttacttcctt ggtataccct taagtgatc agataggaag ccttggttgg atgagttgat 180  
ccgagttatc caacaacggg cagtcgatc gcaaagagaa gcccgacaca gttactgcat 240  
tttttgtgct tgtagtgtc taaagttggc ttatccacca tatttgaaaa acgctttacg 300  
ccaatcagta accaaatgta ctttcagacc ttttgactgg g 341

<210> 2961  
<211> 391  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-058-Q1-E1-E12  
  
<400> 2961

cccacgcgtc cgcccacgcg tccggaaatt tcgaaaccgt cgtttcattt tgtggcttgc 60  
 ttttcttttc tttcaagaat gagcaagact ttggactcac ttgacgattt tcggtttgaa 120  
 gcaggtgtta cacctttctc ctcttttgg, attccctgtg ttacctgtgt tctttatttt 180  
 acgctcacta gagttttcaa gttgttggtt tcgaatcgaa aacccttcg ttccccttca 240  
 ttattgtttt ttacaatgg ctgtttaagt ttcttctctt ttattctctt tattgctctt 300  
 ggtgcagtta tttttgaaaa gtccaaactc tatacccctc atgagttggt ttgtggctcc 360  
 gctaccatc aggatgggcg gcctcagttt a 391

<210> 2962  
 <211> 383  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-E2

<400> 2962

gaatggaagc ccacagaata catttggtcc aggttgcatt caactagccg aagagaaaca 60  
 agtgtttatt gtggcgatg agtttaaactc gggacaaaca aatatgaagt ctgtgctagt 120  
 agagtactta gtgggtagtg gaatgaaagt ggagtcgatc gtgacttata gccacttatg 180  
 gaacagcgat atgtttcagt tgactgacgg agaaatgtgg aaaccagagt ctgccgcgat 240  
 aagtagagtt attgaagata gtgtcagttc caatgggact ttatacacgg aagatgaaat 300  
 gccggatcat gtagtagtag caagatatgt gccttcgtac ggatattcga acagtgatgt 360  
 cgccgagtac ctgactagaa ctt 383

<210> 2963  
 <211> 346  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-E3

<400> 2963

aggattttgt tcctcttgca aatgctgcag gtcttggaag ccgcatgtat gagttgggtg 60  
 acctgagttt gagaatattg ttccctcaat cctacttaaa gttcgaaaag tggcatttat 120  
 ttattcgaga ccaagcacia gatgtacttt cttccgcgca acgtgaactt cttctttgtc 180

ttatgagggga cccatTTTTta gtccgtcttg ctgaacaatt tacaattact ggtcgcacga 240  
aggacatggg ttctactttt attaaaatgc tcaaacaaaa caagacaaag gagcagatcc 300  
ttgactttat tgcaatgaga gttattattc gattgcgacc aggagt 346

<210> 2964  
<211> 409  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-058-Q1-E1-E4  
<400> 2964

agagaagaag agcgtgcgtg gaggatggat tccgttattg cactagttgg gaaagacttt 60  
gttttatcag cagcagatac tgccaacgcg cgttcgggtca tagtaatgaa agacgatgtg 120  
gacaagatat tggagctgga tagtcataag accttagcta tgggtgggga gccaggtgac 180  
tttgtgcagt tcacggagta tatacaaaaag aatcttcacc ttacgaatt ccaaacggga 240  
ttgcaactaa gtactcacgc agttgctaac ttcacccgtg gggaattggc tagattgata 300  
cggaagccc ccgtattaac caacctactt ttgggggggtt atgattctgt gtccgggcct 360  
tcactgtatt acatcgacta tcttgggtact ttgggaaaac tagactata 409

<210> 2965  
<211> 361  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-058-Q1-E1-E5  
<400> 2965

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tctttttggg atctctcttg tgttttgccct tttcaaagct tgaagactat ttattctgta 120  
atgttttaga ggtttcttcg gagttttttt gtactagtct tattccatgc ttcgtgggtg 180  
gtgaaaggct cctttcacia cagcgttgtc atgatccgc caatctctac atcttcaatt 240  
gccaacttat gcgcgtatat ataagtatat ttgtacagac tcatggtgta gaaagaagag 300  
tgcaatgggt gaaaagtaac agcaaggtag taaggtagct gtanaggaag cacttgaaaa 360

a

361

<210> 2966  
<211> 341  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-E6

<400> 2966

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taacaagacg tttcacagga gttcatcatc agacaacaat ctgtgaacta acactgggac 120  
aagtattggt ctgtacggtt ccacgaaatt ggaagacgaa atacgtgtaa ttcccgtacc 180  
attgacaacg cgtcccaccg tgtaaagcag gacgccccga gagagtagag cgagtgacca 240  
gataagacgc gagtctaatt gatgatattc ggtccactcc atctaaggct gaatcagtat 300  
ctggtgaaaa agaattctca gatatggcct gacgagtgga a 341

<210> 2967  
<211> 342  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-F1

<400> 2967

agcggacgcg tgggcggacg cgtgggggaa gtgaagacgt aagacgtgaa aaaaaaagcc 60  
cagaagccaa gataaggat caaagtaaag aaagaaggaa aaggagaaga agagagggta 120  
ggcttagaag cagcaaacca gagaggaaag cgttaaagca tgaaagaaaa gaaatccgaa 180  
aaagaagaga aaaaggtaag aaaggaggacc gaatcagggt aagaggtaga ggagcaagaa 240  
gagaagagag aatgctgggt ggagtagcga aacaagagaa gggaagtaaa aggtaagaaa 300  
gaggaaaggt ttacgagaga aggaagtaga aagaagagag tg 342

<210> 2968  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-F11

<400> 2968

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cgttgacgac ctcttccgta ctgtacgctg cagcaaagga gataggtttg cgtcattatt 120  
tgttatagat agctttaaag agtttatgaa atcataggaa gacgatgtgc caaggagaat 180  
cgggattttt tggaatgtaa gaatacggag gaaaaccgg aaagttgtct tggacagggg 240  
gagaaggatga ccaactgtgt gctgcagtta ctcaaagatt tgaacgcaac ctgcccacga 300  
gagtttgaag aatacagtgc gtgtcttgat aggcaatcaa gccaaacttta tctgtttgat 360  
cgttgtcgaa agtttgaaag aaaccta 387

<210> 2969

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-F12

<400> 2969

ggatcgcgtt tatgttcggt cccaagttgt accaccttct agtggtgagg aagaattgga 60  
ctatcctcga atactcaacg cagtacttcc tagcgggata tggatcactg gttggactag 120  
tgtggatgca gaattccacg ctcgattttc agcttcttac cggacatata aatattactt 180  
tagacctgaa aatttgaatc tgtgtgctat gcaacgtgca gcacaatttt ttgtaggtga 240  
acatgacttt cgtaactttt gtaaagcgga cgtttcccaa gtccaaagtt ttcgaagggg 300  
tatctatgcc tgcgatataa agatagttga aatgacgcac aagaatatca tagagaggca 360  
actacttgag tcgatggaaa gccagccgca tcgattggac aact 404

<210> 2970

<211> 321

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-F3

<400> 2970

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ctttactata caaaaaaaga agagcagtag ccgacggtgt tttcaaagca gaacttaacg 120

agtttctgat gcgagaattg tcggaagagg gatactctgg tgtagaagtg aaacccacgc 180  
 cgttgcgaaac ggaaatcgtg atccgagcta ccagaacaca aaacgtgttg ggagaaaaag 240  
 gtcgaaggat tagagaactc actgcgttgg tacagaagcg attccgtttt cctgaaggaa 300  
 cagtggaaact ttatgcggaa a 321

<210> 2971  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-058-Q1-E1-F6  
 <400> 2971

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 gtaaaaggga aaggaaagga gagaaagagg aaagggatga aatgcagaga tctctagaga 120  
 aaggcaagaa agaaaagaaa ggaagacaca gtaaattgagg cgagaaagca taggaagtga 180  
 aacggattag gaacccgtgt agtctatgca gtaaaagaaa gaatgagtaa gaaaaaaggg 240  
 agtcattcca ccaggggagt aaaggcgcaa gaaagaaacc caaagcaatt gacgggaatc 300  
 ggaaaaaggg gtggatcacg taaattaatc cgatttaaac cgagaacctt acctctccaa 360  
 gaaagtgttg cacggctgtc gnaagaacgt gctgtgaagt gagagaacgt acgagaa 417

<210> 2972  
 <211> 354  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-F7  
 <400> 2972

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 tcttactatt caagcagcaa cagtttttgg gactttggag tcaactgaaat atacagagta 120  
 tcttgacatg gtaaaggctg caggcctgga ctcgaggttt aacgactctg ctgtgacatg 180  
 gactgttttt gcagcaaaca atactggagt caatgccacc ttggcaccaa agcacttggt 240  
 tatttcta atcacatcta atgcgacgga gagcaaagaa attgttgaat attatgtcaa 300  
 ccgtacaatt atgtcggatg agattaagcc aggaacaacg atccttacag cttt 354

<210> 2973  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-F8

<400> 2973

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 aacaaagacg tatactcttt gctatggaaa aaatattgca agttactcca aaggaactct 120  
 cctttcgtct ggaactgaac aaacccttg ttcaaactct taagctgaag aatatttctg 180  
 aagagacact tgcctttaag gtgaagacga cacaacccaa aaggactttt gttaagccaa 240  
 atgcagcagt aattggacca ggacaggaga tacaagtttc tattgtgttg cagcccttac 300  
 cagaattacc tccagacgca aacagttgcc gtgataagtt tctactacaa gtgatcaaag 360  
 tagacaaagg agcagaatcc gacgttcaag gccttgtgaa aaatgtgtcg ccagacgtt 419

<210> 2974  
 <211> 352  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-G1

<400> 2974

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 gtgcagaatc ttacagtatt tatatttaca aagtgttgaa acaagtccat cctgacactg 180  
 gtatatcttc caaagcaatg agcatcatga attcctttgt caatgatata tttgaaagga 240  
 ttgcttccga gtctagcaag ctggcagcat actcaaagac aaaaactctt acttcgagag 300  
 aaattcaaac tgctgtacgc cttttgttac ctggagagtt gggcaagcac gc 352

<210> 2975  
 <211> 326  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-G12



<400> 2975

gacccacacg tccgcccacg cgtccgccc cgcgtccgcg ttgtggcagg tttccgcgca 60

ccacgaccaa caaaaggaca cgattattta tgtgaagctc tacttattga ttcaactcat 120

tacgctccgg gagaggaagt taccgtgggt ttggtcaaca agtcaacttc gaaagttaac 180

cctggcaaat ggtaagtga aaatcctccg gttaatggcg gtaaccttcc aaagccatga 240

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gttgatgaag atattggagt tgttgc 326

<210> 2976

<211> 354

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-058-Q1-E1-G2

<400> 2976

tcccggggac gcaagtggca cgacggaagg tagattggga agaaggcaag agagtgaaga 60

agctgcttct tcaagtggag gagacgttcc agttcccaag atacctctca ttcgtcctct 120

tgtaaacagg cgtgctgcag tctatcaaataaat aatctcgaac tttatttctt catacactcc 180

ttcaaattcg tcaagttacg acgtgcgtcc ctctgtgtgt ttgcccccc aaatgtatgg 240

gagtggcaaa accatattag ggaagcactt tacggaattt gttttgttga accggcaggt 300

tttagagaag tatataatcg ggtttcctgg aattgctggc agtggagtga gcgc 354

<210> 2977

<211> 281

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-058-Q1-E1-G3

<400> 2977

ctgcctcttc aagtggatga gacgttccac ttcccaagat acctctcatt cgtcctcttg 60

ttaacaggcg tgctgcagtc tatcaaataa tctcgaactt gatttcttca tacactcctt 120

catattcgctc aagttatcac gtgcgtcgct cagtgtgttt tgccccccag atgtatggga 180

atgtgaaaaa cagtattatg gaagcacttt atggaatttg ttttgttgaa cccgcaggtt 240

ttaaacaagt atataatcgg gtttcctgga attgctggca a

281

<210> 2978  
<211> 382  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-G6

<400> 2978

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tccattgggt tccgctattg ctctgtgtgg agtttgtgcg gtttttgtga gcatcgacaa 180  
cttgttttat aatccaaccg tggtagctct caagtcagag cgggaagcgt attcgcgcaa 240  
tgagaggcaa cgtgactatg aagacagacc ctttttgaag ctggtgaaac cacttcgtga 300  
ccgtcctatc agttttatct ccccaaatga tgaaaatagc aggattcctc attagttgga 360  
tagtaaaata aatagttggt ga 382

<210> 2979  
<211> 324  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-G7

<400> 2979

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ccaagatctg aacgagctca tcttttgggt ccacagacat gtcgaacgac aatcagtctg 120  
agaagagcac tttgaaagaa gcggaggaga agctgcagag tgcagttcat actggaacag 180  
agaaagtttc tcaggtgttg agcgacgtca aggaaactgt gacggagaaa tagaaggaat 240  
ggacagcgcc aaaaagtagc caagaagaag cataagatta agcacaagat gcgaaagaag 300  
aggctaataa agcttttaat gcta 324

<210> 2980  
<211> 371  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-G8

<400> 2980

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caaggaagaa gatgaggagt ctagtgaagc gtcgtataat ccatcggata tggagtctga 120  
ggatgattcc gaggagtatg aaccagatga cgatgtggat acgaaggaac ttgaagagag 180  
ttctggtgga gaggccgaac taagttcaga agaagaaggc ttagattggg atgaaatgga 240  
aagacgagcc gcagaagaag acaaggaaaa gcgtcgcttt ccggaagacg acagagaaac 300  
gaacaaatcc cgcaagcgat cgcgtcgttg acgcacgctc gtccttgaag aataaattca 360  
acgcattttc t 371

<210> 2981

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-G9

<400> 2981

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aactatggag tcagcaacag tgcaaagggt gttttttatc gtttgctttc aaaagaaaag 120  
cagtaactcg acatgtcaag ttgtttaaaa ttgtagctgg acaacacacg acaacaagc 180  
aagaaacctc ttccaccaat cccttggaga gaacagtaga taccgagcag gcacaagggt 240  
tgcataatac ttttgaagaa aaacctttga atgaaacctt ggatagaacg caaagatttg 300  
taccaattat ggcgcccaac aggtgaagaa ctttttaggc agtatcggat tccgttcggc 360  
ctaaccaacg aacagttggt tgaaaagttg caactgttat cagaaagcat agaa 414

<210> 2982

<211> 377

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-H1

<400> 2982

agattggaga aggaagtaga atggttcgtg agttgttcgt gatggctcgc gaacatgctc 60

cttctattat ctttatgtat gagattgatt ccatcggttc aactcgatc gattcgggaa 120  
 attcgggaag tgggtgactcc gaagtccaaa gaaccatggt ggagcttttg aatcaattag 180  
 atgggttcga accacaccag aacatcaaag tactgatggc aaccaaccga atagatattc 240  
 tggatcctgc gttgcttcgc cctggtcgaa tcgataggaa gattgaattt cctaattcaa 300  
 atgaagacgc cagactcgat attttaaaga ttcattcaag aaagatgaat cttgttcgag 360  
 gcatcgactt gaaaaag 377

<210> 2983  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-H11  
 <400> 2983

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 caagtggaaa ggctcgaatg atcaaaagtt gatcatgtac ttgctattag tagaacaaga 120  
 actgacaaag aatgacacca gatggaaaga gaggaatgag cgacctcgga gatggttaac 180  
 gtttgacgaa gcagagaaga ctattttgca agtggagagt ggtattcgaa ggctgagct 240  
 aataagaatg cttttaatag cgaaagcaag aataatgact ttggacaaca atccagagtc 300  
 ttattccacg gactcttctc ctgaagagga gaataacgaa aaggaatttt aacgtgttgt 360  
 tgttgttgtt gtataatata catatatata tgtgcgggtc aacaataaat tcttat 416

<210> 2984  
 <211> 331  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-058-Q1-E1-H12  
 <400> 2984

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 ccctaattgt tggtagagac ggcggaaaag cgaagccttt gaagaagcca aagcctactt 120  
 cgaaggaaact gacggaggag gattttggaat ttaagaaaag acaaaaggag gagcaggcca 180  
 agttgaaagc agctcaacag cagttgaaag gaaagggcaa gaagtgactt tgcttctacg 240

agtttagctaa acaaacgctt tatttgtttc tacaactatt cgggtacttt ttgatagttt 300  
ccgtgaacaa gaattaaaca ttctttctcg t 331

<210> 2985  
<211> 421  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-058-Q1-E1-H2  
  
<400> 2985

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acaagatgtc ttttatattt cgtggaatca aaggcctttc caatcctcgt tatggacaac 120  
ccgtggattt acccaccgga ataatgtata gcttgaagca gatgtcggtc attgtccagt 180  
ttgctttttc tgttgtagtc attgctatgt tctcncaagt taccttttat ctataccgtg 240  
actttaagtg tgctttcgat gggcattggg attacgccac gcatagcgaa gtgtctggtc 300  
ctgtgggtta ttgccgttac ttcattgctt tggggagcat ttccatcgta cttttagcta 360  
ttgttgccgt agctactttt ggaacgctgt attttgaagt tcctatggac tatatccttt 420  
a 421

<210> 2986  
<211> 374  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-058-Q1-E1-H3  
  
<400> 2986

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agtatgatgg tgcagaaagt tatgcgcttt gcgactcgaa tcaagttctc caaggtgtcc 120  
atgcaactat ttatagtgac gataattata taggaagcgt acgtggatac tgtgtgtcag 180  
tcaatacttc aagcattgca agtcttgatt ccttgatgat gaagaaacct ccagtatcat 240  
tgagaagcat tcgagctcgt tcctgaatgg cgttgctgtg tggataactg cgatatacat 300  
atatatatat tcaggtatcc acagctcatt tattcaggat gaacaatcac ttttcgtagt 360

tgctgtgtgt cgtg

374

<210> 2987  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-H4

<400> 2987

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aagcaaaaga gtggcgaaaa cccccgaca taagtccgtg gacaaacttt aaggcttgct 120  
ttactggttt tggaacagcc ttggcacttt ttaccggtta tgttggtttt aaacaggcct 180  
aatactattt ttacaaccct acacagacgc aagtccccga gacgaaatcg gaagaacttg 240  
gctcctgagt ttcgtgttct tgtaaagttg gaacctcacg tctatcccta catggtgtca 300  
aagacaggcc actgataagg ctaaagtttt gtcctcgttc cttgggcca agtaataaag 360  
agtgttatgt tttctc 376

<210> 2988  
<211> 373  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-H5

<400> 2988

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tcaccacctt tatggttatc tttttcgatt atcagtgggt tatgtatatt cacttcagta 120  
acctttgtac aagttgatat gggagtagtg ttggaatggt tccgaaggct tccctatcc 180  
atatttcgca ccggtggagt tttgcgtttg gcttgtggta tggcttgggg tgcccatctg 240  
tttgaagcct tggtagcata tcgaatatgt acaagacttg gtggtggaaa agatacgtgg 300  
aaatggacga tacaaacttt ttgcgtagga taccctccc ttcgtttgtt gcagaaaagg 360  
gaaaggaaga cga 373

<210> 2989  
<211> 389  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-H6

<400> 2989

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aggattgtga aaaatgtttg cagctagatc ctcaatttgt aagagcttat gccagaaaag   60
gtgctattca tttctatatg aaagaatatc ataagagttt ggatgcctat caacaaggac  120
ttcaagtgga tcctaataat gcagaattga aggaaggatt gcagaaaact ttgagtgcta  180
ttgcagaaca acaacgctcc gagaaacctg atgaagaaca aatcaaakat gcaatggcag  240
atcctgaaat tcaaaagata ttgatggatc ctgtattaca aaatttggtta caagaagcgc  300
aatccaatcc ttcttgata cagaaagcaa tgtctagtc aggaatggca gcaagatac  360
aaaaacttgt tgctgcaggt attttaagt 389

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<210> 2990

<211> 382

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-058-Q1-E1-H7

<400> 2990

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aatgtcccgg ctcgaccac gacgtcagcg gacgcgtggg cggacgcgtg ggcggacgcg   60
tgggtgaaga agcatatcgt gaacaacagc ggcgagcaga ggaagaaaga ggcaaatacg  120
ggaaagcagt aaaagaagaa agagaaagga aaaaactgag tatcaggaag aaaagaggga  180
gtagatgagg aaagaaagat caaggaagta agagtaagag aaggagtaat gtgaatgaaa  240
gcaggaaagt atttgaagaa gagagtgtaa agcacgtacc ttttgcataa tgtcccagcg  300
agtgaagag gaagcanaaa gaaagaaaaa gaagtagcca ggtaagaccc gaagctagtt  360
gatcttatgc tgtccaagcg aa 382

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<210> 2991

<211> 389

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-H8

<400> 2991

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 ggggaaagaa atgtgggtga caagttgcaa aggacgcaag gaggaggatc atcgaatatg 120  
 agagcactac agcaacttgt tgcgtttcaa cacgatagct ttttatctca tcacaaaaag 180  
 aatatatttt atatgccttc ttctttctcat tgccaaaagt cctcactcaa gtgggtctttt 240  
 cctagaaggg cggcatctcg tcctttatct tgtcatcaag tatttgaaat aacccccgac 300  
 aaacctgcag ttgttgtcga ccaactttgt aaatcattca gaatagcaaa gagtcgtgat 360  
 agtaagcaac cttctcgtgt ggattccgt 389

<210> 2992  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-058-Q1-E1-H9

<400> 2992

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 ataggttgga acgtttggtc atccattgac tagtgaataa tactcgattc cgtatatattt 180  
 atctctttat tttctacttg tacataaaac tagttatatg tctggtagct ataaaagccc 240  
 tttgccatct caacatttat attatttggt gttggtgaga gacgagatgg caatctccac 300  
 tttgcttcga gaaagtagtg tcactatgac acccaatgtc ttgtcacttg aaatataata 360  
 gaacataggc aatatttcgt gctgcaaagg cacttgatgc tgaaataaaa a 411

<210> 2993  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-A1

<400> 2993

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 gcaacgacgg gctttgtttc atcgtatcaa ggtgttgctg tacgaccggc ttggaggaag 120  
 caaactatcc gaaaccagca aacaaatacc atattgttca gaaaccacgc aaagtcttcg 180



aaagttaggt tatcgatacc ccttttcatg cagcaaactt ccaaggatga cgcggaaccc 240  
gagaaacaat cgagtcaaca gggctccaaa atgtcaccaa ctactaggat tgcaggtgat 300  
atctttttct ttactattac tatggcactt tttgcagtca ctctggcggc tactttgtat 360  
cgctcctacc ttccgc 376

<210> 2994  
<211> 423  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-059-Q1-E1-A11  
<400> 2994

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aagagatttc agtttttggc ttttgataag tcagaacctt ggaagtatgg ttataacaaa 120  
ctacggtatc ttcaaggcga aataaagaat aaaaagtggc tgagtcctgg acatattact 180  
tcgaggaatg ataagaagtg gcataaagtt cgacacgaaa gtgactagtg tgcttgtcac 240  
aaggaggaag gttgtgcaat gagagcccaa gtaatccatc aaaggagctg aaçaaaaggt 300  
gctttgaatt cggaacagtc tcttgagtaa aaataaagaa gagcggtaac tcaaaancaa 360  
ctggcaaata aatacccctt ctttatccag tcttttatag gtatgcgctc caaaatagtc 420  
acg 423

<210> 2995  
<211> 420  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-A12  
<400> 2995

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gaccatcacc aagaattctt caggtacatt tgtaggtcct ttccgagtgg taaaacctga 120  
tgtcgctggt ggctcatcct ttatcgatgt gattgatgga gttcttgttc caccaccacc 180  
aacttccgcc acaagtgtct caactgctgt aacttctgct cccatcacta cagtttttcc 240

aagcagcgta accagtgcac caatctctac aggaattcca agtgggtgta taagtactag 300  
 tgttcccact agtggtgctg gtgttcccaa tggagcttct attatattac ctcaagcttg 360  
 ctaaatecgt atagttgggt attgcaaatg tctcgtctgtg tgtgtgttgg tgtgtgtgtg 420

<210> 2996  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-A2  
 <400> 2996

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 ggcgttttga aaagaaggga ccttcacctg gtgcttggca agacgcgagt agttccaatt 180  
 ctgataaaga aggtctccat attggcccaa actgtcaact tgtagtttgc tctgttgata 240  
 acctgaaaga cttcttgggt cagcaagttt atgaacaact ccagaaagta tactcggata 300  
 atgaaagcgt tttgatgaag ttggatcctc tcgcgaagtt gttgggaaga aatcttgaac 360  
 gattatggag gagcgatggt cctgtggtgc ccg 393

<210> 2997  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-A4  
 <400> 2997

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 gggactcttt taaagcccaa tatggttctt ccgggttctg actgcaagga caaagcttct 180  
 ccaaagaaaa tcgcagagta tacaattcgt acgttacagc gtactgtgcc agctgccgta 240  
 cctggcattg tctttttatc aggtggacag tcagaagaag aagcttccgt gaatctcaac 300  
 gccatgaatc aagtggagat gatcaagcct tggaaacttt cctttttctta cggacgtgct 360  
 ttgcagtctt catgtctgaa agcgtggcaa ggaaaggcag agaatg 406

<210> 2998  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-A5

<400> 2998

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 cgcaacgagt ttaacctcga gtccaagtcc acgattgggg taaaatttgc gacgaaaagt 180  
 gttcaaaacc gaagggaaga cattaanaagc acaattatgg gacactgctg gtcaagaacg 240  
 gtaccgtgct atcacctctg cgtattatcg aggtgccgtt ggagcacttc tcgtatacga 300  
 tatctcgaag aaggaatcct ttattggtgt agaaaaatgg ctaaaagagc ttcgtgatca 360  
 cgcggatagt aatatag 377

<210> 2999  
 <211> 375  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-A6

<400> 2999

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 attgatcacc atgtccgtca acccgagtcc gtcagcgatc atatgtaccg tatggctttg 180  
 atctgttttt gtttagcacc aagtcactta aatcgagaaa agttaataaaa actagcactg 240  
 gttcatgatc taggagagtc tctggttgga gatatcacc cacaatgatgg tgtctcgccg 300  
 gaagaaaaga agaaactgga gaccgaagcg ttttgcaaaa tacgagacga atatttatcg 360  
 tcttgtgcag ttggt 375

<210> 3000  
 <211> 358  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-A7

<400> 3000

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tcttcaaaga aagaagccac aagtaaacct gcagcagcag atgctacaaa gacgacagaa 120  
aagtctggtc cggaagccaa gttgaagga actggtgcat agaaacaata gaaagttgac 180  
tatgcatgtt cctgttatgt tttgtgagtt ctgtttgata gtttccagct attcttttgg 240  
tagtgaataa agagaaaaat ttttagattt acacaatcac cccacatgat ggtgtctcgc 300  
cggaaagaaa aaaaggaaac tggagaccga agcgttttgc aaaatacgag acgaatat 358

<210> 3001

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-A9

<400> 3001

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caacgacaag ttcgacaaa cctatgccga aagcgttgcc aaggaaatca tagaaagcac 120  
cgtgggagaa gagaaatacg aacacacaaa gacagtggaa tggaccaatc aaatgtgtga 180  
aaaaatactg agcaagttgt tggagctgca aaagcctttc aaatatatag tctcttggtc 240  
tttattgcaa aagaaaggag ccggattcca tactgcgacg acgtgttatt gggatgccga 300  
atgtgaccaa tgctgtactg tcaaacatga gaccaaatac ttgcacgtca taagcaccaa 360  
ttaagcgcgg ttcaattcac tagtcaaagt atcattctag cccgcacaca aatatgttca 420  
actcgta 427

<210> 3002

<211> 370

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-B1

<400> 3002

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gtactcgagg agaaaggaga cccaaattaa ggtgagagaa tggacgataa ggaactaagc 120  
aaaaggatat ggtatctgcg gtagaacata tgaaagaagc agcaccgact gtttagcaaa 180  
aacacagcac tctgcagaaa agagaaaatg taaagtatag agtgtgcggc ctgccaaata 240  
gtagagaaga aatcgatgaa agtgaaagcg agtaaaagat gaggtataga gaatggcggg 300  
cctaacagta aggatccaaa ggtagcgaag taaatagacg tttgaaaggc gtccagtatg 360  
aaaggagaaa 370

<210> 3003  
<211> 310  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-059-Q1-E1-B11

<400> 3003  
ccggagaaaa aaaagaaaag aagaaaaaaaa cccttctgaa aaaccacaca agttctccaa 60  
ggaaaaaggg aaccanattt agggtaaaaa atggacgata aggaactaag caaaaggata 120  
tggtatctgc ggtagaacat atgaaagaag cagcaccgac tgtttagcaa aaacacagca 180  
ctctgcagaa aagagaaaat gtaaagtata gagtgtgcgg cctgccaaat agtagagaag 240  
aaatcgatga aagtgaaagc gagtaaaaga tgaggtatag agaatggcgg tcctaacagt 300  
aaggatccaa 310

<210> 3004  
<211> 343  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-B12

<400> 3004  
caagccttca gccaaagcctt cggccaagcc ttcggaaatt cgttgctttg ggaattaagg 60  
ctgaaaagga gaattatttc gcttccggac cctgaaacaa acactcatat atacatatac 120  
atatattttc tatagatata gctattcttc aaatggtttc caaaaagacg aaaaaatcca 180  
ctgaaacagt ctcttcaaga ttggctctcg ttatgaaaag cggaaagacc acgttgggct 240  
tgaaaagtac gttgaagagc cttcgtcagg gaaaaacaaa actcgtgggc ttggcaaata 300

actgtcctcc tcttgtgcgc tcacagattg aatattactg tct 343

<210> 3005  
<211> 397  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-B3

<400> 3005

gaccacgcgt cagggcaatt cgaatcatct acttaaagac acctttttcc ccttcctacg 60  
cacgaacgct cgtaatatgt tgtttcattg ctctgtaagt ttatgtacga aaattataga 120  
aaccaaagaa actgcatatc ttgaacgata caaaggtctt tggatccttt ggggaatagt 180  
cctaggtgga ttcagtgaat gttgttactg ttccccggag gtcttgtgaa ccatcagctc 240  
tagtatagtg acttttgcac acaaactatt ataaaagtat ttcacggaaa gtattgaaat 300  
ttttgacttt gcagtttgca gtcgtccagt aaacactaga ttactagtta aaaaatgtaa 360  
acgttaagta ataaaatata tgttcaaacg aaaccaa 397

<210> 3006  
<211> 402  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-059-Q1-E1-B5

<400> 3006

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atacgatcgt aaagtatttt cgggtgatgc agttggcaat gaaacggaag gaggatcgat 120  
ggacgattgc gcaggagttg tggagtttga agagaacatt actgcacact ttgactgtgg 180  
attcacaagt ggttatagac aatgggggtga atgtttaggt acacttggaa tgttgagagt 240  
ggaacgtttt caaggagctc cggttcctaa taatacagaa gagaaggatc ccaatttgca 300  
cttcagttt cgtcaacttg gagaagaaag aaatggccgc attgaaaggg tagaaagggg 360  
aaccaaagac atttgggttg caaatgttgg gnggaaaaca ca 402

<210> 3007

<211> 282  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-B6  
  
 <400> 3007  
  
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 agtgctttta gtttgtatgt ggatgaagac gaataagaaa gtgacgaaga ggaagaagaa 120  
 gaagacaaaag aggaagaaat gggcagtgag tatggaatga gtagtgattc tgattccagt 180  
 agatttatga gttatgacga agaagaagaa gatagttcag atgacgaaga tcaagtctct 240  
 gatgttccca tgtttggcct gatcgtacat gaagaagaaa tg 282

<210> 3008  
 <211> 367  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-B8  
  
 <400> 3008  
  
 agcgtatgca ggaaagaaga aggtaaagga agagaaggaa gaagcagaga gggactatga 60  
 gcgagaaggt ggatagtcga tagggaaaaa gcccataagc caagataagg tatcaaagta 120  
 aagaaagaag gaaaaggaga agaagagagg gtaggcttag aagcagcaaa ccagagagga 180  
 aagcgttaaa gcatgaaaga aaagaaatcc gaaaaagaag agaaaaaggg aagaaaagag 240  
 ggagtagatg aggaagaaaa gatcaaggaa gtaagagtaa gagaaggagt aatgtgaatg 300  
 aaagcaggaa agtatttgaa gaagagagtg taaagcgcgt accttttgca taatgtccca 360  
 gcgagtg 367

<210> 3009  
 <211> 439  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-B9  
  
 <400> 3009  
  
 cgggtcgggc cagcgtcag cccaagcgtc cgccacgcg tccgccacg cgtccgcaac 60

atcatccgtc agaaatgcaa agtaaagga gtatggagca aaaagaatat gaagctccca 120  
aagatggtga cgaaatccaa gaacaacaac ttccgtttat ccaagtgtgg aaacatggcc 180  
actcagatat aactgtttgt agaattattcg gagtgtgtat tggctcaaaa ggtctccgtg 240  
tattccagaa tactagtaag gcaaaaaaac aacttgaata ctgtggaatc aaacctcatc 300  
tttatgaaag cagtggagtt gaagagtggg taaaaatatc agcaatgtct aactattcaa 360  
ttcaacttga ccaagaactc cgttcctaatt ttgccttaag gaacacatat gcccatttc 420  
attgaagatg taacccct 439

<210> 3010  
<211> 383  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-C1  
<400> 3010

agcccacgcg tccggaatcc agtgtttttc agcttaatct ttgcagtgtc tgtagttgca 60  
gtggcatgtc cttgtgcatt gggtttagca actccttctg catttatgac tgcttctagt 120  
gtcgtgttgc gttatggaat attgcttaaa gaaagtatcg tagtacaata tctataccac 180  
gctgcctgta tcattttcga taagacagga accctgactt gtggaaagcc aaaggtctca 240  
gaagttcaag gtcttaagat agttgcaggt ctgatattg acaagataat aagtttggtt 300  
gctcaagtgg agagtcactc agaccatcct tatgcaaag ctattgttcg ttacgcgga 360  
gaaactcgag gtttgcatgt ttc 383

<210> 3011  
<211> 418  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-C10  
<400> 3011

agatcattcc agtgctattc cagtgaacaa aaacggcaat gacttttgta atgcaccttt 60  
cgctcaatgt cctcaagata cttactactt tgacctcgtc gataaatccg ataacctttc 120  
catcaaattg tattggagat gggcaccgga gttttccgat attcaatgtc ccatgaaagt 180



tctttctggt tctgttcccc gtcacaatta tagttttcct agtgggccag atactgtttc 240  
atgtgatatc aatatcatgg acgctgggtca atgggaattg ttgcaaagg atgccaatgt 300  
gtctactgca ggctattctc aaggcataag taatttgagc aaatgtttct cttccgataa 360  
gagtgcccaà tacttttggga ttgccgctta tgcattgaca ctttcccaac tgaaaatc 418

<210> 3012  
<211> 317  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-C11  
<400> 3012

ccggccaagc cttcgcccaa cccgtcggcc aagcgccgg gaagaaagag gcaaatacgg 60  
gaaagcagta aaagaagaaa gagaaaggaa aaaactgagt atcaggaaga aaagagggag 120  
tagatgagga aagaaagatc aaggaagtaa gagtaagaga aggagtaatg tgaatgaaag 180  
caggaaagta tttgaagaag agagtgtaaa gcgcgtacct tttgcataat gtcccagcga 240  
gtgaaagagg aagcaaaaag aaagaaaaag aagtagccag gtaagacccg aagctagttg 300  
atcttatgct gtccaag 317

<210> 3013  
<211> 416  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-C12  
<400> 3013

agtgaagaa gtcgcctact ttggtgccaa gtacgaacga ttccttgat aacaacttgt 60  
tgcttgactt gggttaaata ttagtattta caagaatggc tagtgtttcg ggtcttcctc 120  
gaagaattat aaaggagacg gaaaagttac ttcaggatcc agttcctgga attagtgtg 180  
ttcctcacga agacaatgct cgttatttca atgtgattat ccagggtcct gattcttccc 240  
cttatgaagg aggaacattc aagttggagt tattttcttc cgaagactat cccatggctc 300  
ctcccaaagt tcgtttcttg acaaagatat atcatccgaa tattgaccgc ttgggaaaga 360  
tctgtttgga tatattgaaa gataaatgga gtccagcatt gcaaatacga actgtt 416

<210> 3014  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-C2  
  
 <400> 3014

agccccacgcg tccgcattgt tgaattttcc tgtttcgttt acttgtcttt ttgttgagtt 60  
 atcatggcac gaacaaaaca aacagcacgc aagtctaccg gtggtaaggc acctcgaaag 120  
 cacttggcaa ccaaggcagc aagaaaatcc gcacccgtaa ctggaggagt gaagaagccc 180  
 catcgttacc gtcccggtag tgtcgccctg agagaaattc gcaagtacca gaagagcact 240  
 gaactttctta tccgaaagtt gcctttccaa aggttggttc gtgaaattgc tcaagacttt 300  
 aagacggacc tacgtttcca aacttcggcg gtgactgccc ttcaagaagc ctcggaagca 360  
 tacttggtcg gtttgtttga agataccaat ctttgcgcaa ttcattgcca 409

<210> 3015  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-C3  
  
 <400> 3015

cgaccacgcg tcagcccacg cgtccgtttt ttttatTTTT cagtttcgtc tatttgcgt 60  
 tttgatgtgt tatcatggga ccatcaaat aggcagcagc caagtctact ggtggtagtg 120  
 ctgctccaaa tcacttggtg atcaaagcaa caagagcgat ccgcaccctt aactggaaga 180  
 gtgtcgaagc cacatcggtg ggcgcacggc actgtcgccc tgagacaaat tcttctgtat 240  
 cacaaaacga ctgaacttct tatcggcaag ttgcctttcc aagtgtgat tcgtgaaatt 300  
 gctcaagact ttatgaccga cctacgtttc caggcttcgg ccgtgactgg ccttcaagaa 360  
 gcctcgggag catacctaata cggtttgggt 389

<210> 3016  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-059-Q1-E1-C4

<400> 3016

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atgccacgta ggataggaga atatgcggat ggatatgagg gatggaatag ggtagcgagt 120  
tatggatcga taataacggt gttatcgatg ttatactgga tgtggttggt agtgaagagt 180  
tgggagaagg gtaaggagag tgagttaagg tgggaaggaa ggagtataga gtgggggatg 240  
agtaggatag gttatcataa ctggaaggag gaggtgatgt tagtgaaggg gatggggtaa 300  
ggccgagtan gaggaggtaa tggaatttgg atccgtgtgg tgggtggttcg agtccaccta 360  
ccccagtggg ggtaatggag aagagaagaa ag 392

<210> 3017  
<211> 433  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-C5

<400> 3017

tcccggtcgc acccacacgt caccgccacg cgtccgccca cgcgtccgcg tgtctccatt 60  
tgctgtctct cgacgctcat tcgatcgtcg cttttagca acctaagaga cttgtttttt 120  
tctcttttgc tttctcttaa ctacggtaca ggtattgggg gtttggtgaa agtattgccca 180  
aagggaaaga gtcacttacg ttcattgggta cactgaaagc tcgtgatggg ggcttgccctt 240  
ttgcaacctc tccaaagaac ctgggagtat cacttccaac aaatatggag cgaaatggaa 300  
agcgacagga aactgtgttt cggctctgca atagaaacga acagaaaacg gaaagcgtca 360  
agaaggaaag taccctcteta gcttctatgt ttggtgatga ctcttcggaa acagttgaag 420  
gaaaaatctg tgg 433

<210> 3018  
<211> 399  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-D1

<400> 3018

ccggctcgac cacgcgtcag cccacgcgtc cggtaaagaaa aaagggagtc attccaacaa 60  
 gggagtaaag gcgcaagaaa gaaacccaaa gcaattgacg ggaatcggaa aaaggggtgg 120  
 atcacgtaaa ttaatccgat taaaccgaga accttacctc tccaagaagg tgttgcacgg 180  
 ctgtcgaaaag aacgtgctgt gaagtgcgag aacgtacgag aaagccaagt gaggaaaaga 240  
 aggcaagtaa agggcgggccc gagaaaggaa agggcgtaag acgtgataca gagtaggaag 300  
 aaaagagaag agagctagaa aggaggtaaa agaagagtaa aaggactaga agaggtagcg 360  
 aattcacgag gaaggagcgt gaaggaagga ggaatccca 399

<210> 3019  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-D11  
 <400> 3019

tttcgtacga acctcgtctt aagagtctgt tcaaggccac agtgctatgt tgcgaagctt 60  
 ggtgcttaac catccacgtt gagcttttat ttttatctct ggtctttctc gtataggaca 120  
 ctgataggca aaaacctcgg acacttggga ctttcgaggt ctatcgtaat aaacactaaa 180  
 tttgtaaagt tatctgctgc ttgcagtcga aacttcagga tgccttgtgt tgaggcatca 240  
 gctggtgctt ggttgactaa gattcttcca aaaatatctt ggatacctag agggaaaaaa 300  
 tccatccaaa aaatttctaa gcccaaccagc caatcaagac aagggcaggg aaccacgaca 360  
 gtgcttgctt gttgacacag 380

<210> 3020  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-059-Q1-E1-D12  
 <400> 3020

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 ggtgttatta taatatgcct tctttacaag aagatttgct tcatccagat cccgcggtgg 120

aggcacgaaa acacaagttg agaaggcttg taccgagtc caactcgttt ttcattggacg 180  
tcaagtgtccc aggttggtttt cagattacta ctgtcttttag tcacgctcaa acggtgggtga 240  
tgtgtggaaa ctgttctact gttctttgtc aaccacagg ttgttaaagca agattaatgg 300  
aatcctgttc gtttagaaag aaagcggatt gaggtaaagt gnacaagtcc gctgtcatag 360  
aaacttaaga ggaaatccaa caaaaagtct agtatccacg aggtt 405

<210> 3021  
<211> 145  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-D2

<400> 3021

caagccttcg gaaaaaaaaa aaggaaacaa atcaacaaag aaaataaaag aacaaaaaaaa 60  
aaaacaaaaa acaataaca gaaaacaaga aaaaagggtg gatcaaattg ggggaatccg 120  
aataaaacga taaaccttac atcgg 145

<210> 3022  
<211> 365  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-D3

<400> 3022

cgcgctcaacc cagcggtccg ataagaaaaa agggagtcac tccaccaacg gactaaaggc 60  
gcaagaaaaa aacccaaaag cacttgacag gaatcgcaac aaaagggtgg atcacgtggg 120  
gggatccgct taaacccaaa accttaacct cggccaagaa ggtgttgac tgctgtccaa 180  
agaacgtgct gtgaagtgag acaacgtccc agaaagccac gtgaggaata caaggcaagt 240  
cgagggcggc ccaacaacgg agacggcgta cgacgtgata aacactcaga acaaccaga 300  
acacatctac aaatgaggta aaacacgact aaaacgacta gaccacgtac ggaattcact 360  
acgaa 365

<210> 3023  
<211> 408  
<212> DNA

<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-D4  
 <400> 3023  
 aggggaaaat cccgttcaaa ttaggctaag ggtgcttgggt attaccggca tgggttctttt 60  
 cgagtttgac gaagaagact tgctgtcagc agatgacact atttttaacg tgggaaggctc 120  
 tggagatgag tgggtggaagg agttgagttg ggaagaaagc aacctttttc gagtagcgctc 180  
 ggaacagagc ttgagcggct tggcaagtac ttctggaatt gccgagtttg actcgaggaa 240  
 gcttttttct ggagtgccta agaaggaatt taaagaaggt ggcgagacga cagtgattga 300  
 ttatttgtca aacgagtttt atccaacctc cgcccctaga atatccgaac cttgtgcgctc 360  
 gtctagctat tcacacgcaa tgcctccaac agaagcgctg ttgaattc 408

<210> 3024  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-059-Q1-E1-D8  
 <400> 3024

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 gaaaaagtat tcttgcggtt agaaaaaagg ttccaatatt tggaatatct agaaaaaagt 120  
 gcgttggatc ccaatatact cgtacctgcg tggatatcgag acaatgtgca aaatactttg 180  
 ccgttggtat cccttttggt cgagcgtttg gaacaagaac atgtggtaga tattgcagaa 240  
 gaggatttcg atggccatat agatgatagc attcagcaca agatacagga actagaaaaa 300  
 tggaaccaa aatggaagtc gttggaagaa ttggcatcga tggttgcgac cacccaatga 360  
 cgangaggaa aggagacacg ataataagac catattttca tttttc 406

<210> 3025  
 <211> 291  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-D9  
 <400> 3025

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 cgggattgaa cggtataaac actgatgaag aagaaccgac tttgtgattg cttcgtcact 120  
 gtagtctttt attttgtgga tggtcacagg gtgccattca tgctgtttta tgatggagtt 180  
 gtttagtaata attggtgaat atattttagg atttttagtaa tctaaaaaaa agccatgttg 240  
 tttcttggtt ggggtttgat aaaggatgtg acggaattat ttgtcttggtg g 291

<210> 3026  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-E1

<400> 3026

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 aatattatgg cagacacaga actacttgca gcgattcagg aagttttaaa aaagtctctt 120  
 atgggtgatg gtgtgacgag agggattcgc gaatccgttc gatgcattga agccggacaa 180  
 gcccactag tcattcttgc ggaagattgt gaccaacctg gaataccagc gttggtagaa 240  
 gcgctttgtg cggaacaagg tgtcaacttg gtaaaggtag cggagcgaaa acaactagga 300  
 gaatgggctg gcttgtgcaa gattgatcaa gaaggaaatg ccaccaaagt agtagcttgt 360  
 tcttgtgtgg tagttaggga ctttgagaa c 391

<210> 3027  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-E10

<400> 3027

agcaaaaaac ataaaatatg tcttttcttt tagaactttt aaaagaaatt cgctggagag 60  
 gactttgggg aacttttcaa gcagccaaaa tgaatagact ggtacaatg aagtactttg 120  
 tcggcgaaga cgagtttcac aaccgatact ttcaaaaagt aaacgatgtt atgttgaagg 180  
 atcgttgggt ggaatatgct tctaaggaat tcactcctga tccttattcg ttacctctg 240  
 agtggtagta gaatacttgt ctttcgttta cttttctta ttttctaggc atgcctggct 300

gcacatatt atagatgagc caccacaaa agtaggtttc cagagaccaa agtatcaagc 360  
acagatcgtc gcaaaccgta caggcacaac agt 393

<210> 3028  
<211> 423  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-059-Q1-E1-E11  
  
<400> 3028

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tgctcttttc tctctttcct tctcgtgcc gcagttgcag ccgacgtagt ttcagaggag 120  
agatggggat atgctcagca aaccaacaa cagcaacagt gccaacaagt atgtaaacag 180  
tatgcatact atcagagtcc agtctgcact tccgtaacca cacagagccc atactggacc 240  
caatgctcga agactgtgca aacctttgtc ccaagccagt gcagtactta tacccaatct 300  
cctacatgga cctattgcag cacctacacc accactagcg taccatctca atggaacaag 360  
ggccttgact acctatactc aaacctgctg tgcttatgcc caacanactt cctatgcagt 420  
cag 423

<210> 3029  
<211> 419  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-059-Q1-E1-E2  
  
<400> 3029

ctcgaccaac ccttcagcaa aatatttacc ccggaacat aataaatatg gggctgataa 60  
tgtaaaaaag gtccttaac aacatgatgt ttgacatggg catcgatatt cagaacatgt 120  
atgtaaagtt catttttgac gagaatcaca agcaaaagaa aggcgagttt gtgcaagagg 180  
tgaaagggaa gcttgatttg gtggagaagt ttatgaagcg tcaagggaaa ccttatttgg 240  
caagcagtga acctacgttt gccgattatc tcatgtttga ggttttggac gtgatcaaga 300  
gacaacagga agatattttg aaagatttcc cgttgttgca aggtttctat gaaaagatgg 360



gtagccgtcc gaacattggt gcgtatcgta aatccgaccg tttctatgag aaacctgtt 419

<210> 3030  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-E3

<400> 3030

aggatcatatt gaaggttttc ataattattcc attggatcaa cttgcttcca gagtgacaga 60  
agtaagtaag ataagatatg aatttgtatt aaagttttga gatgattaga ttcaacaaca 120  
agtcaaccaa ggaaagcgca' ttttggtgat atgtcgtcgt ggcaatgcgt ctcaacaagc 180  
agttgcctta ctgtccagtt ggaatattca tcctgtatac gacatttttg gtggtataga 240  
agaatggcgg aaacaatgtg atccttcact tccttattat tagatgataa cagcatactt 300  
tctttatttg gatgccacaa gtttctcgac gatggaaaca catcgatgac aaagttgtgg 360  
atgtgtttca ttttgtaaga cagtcgtgga aaagttccaa catcgaatgc 410

<210> 3031  
<211> 279  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-E6

<400> 3031

cgactcaagc gtcacgcca cgcgtccgcc cagcgtccg aaattgagaa gacattggaa 60  
tgggcgcgaa acaataagat tcttgccaac tagagtcgat gcaaccatta ggaaagattg 120  
tgtaagaata ataccagcga acaacggagt aaataatggt tgatgagaga agtgaaaggg 180  
aagcttgatt tgggtggagaa gtttatcaaa cggccgggga caccttaggt tccaagcatt 240  
gataccaggt atgccgatta acacatcttc gaagttttc 279

<210> 3032  
<211> 357  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-E9

<400> 3032

acgcgtcaga taaaaccacc gaaagtgata tacctgttga ggactccatt atttcagacc 60  
tggctgaaaa gacacttatg tgttgtattg aattattgcc tgaaaatgag attcgcgaga 120  
aaactttatg tttgaaaaca attgcaagtt cgttggacgt tttatcaatc aactctaaga 180  
aattgttgcc agttattcct tctaatttga atgcagtaaa taaggagttg acgacttgga 240  
acgtgagcgt cagctctgaa cacccgaaaa gctcaatcaa cgacgatgga cgacgggact 300  
cgcttgtctt tagttgtcgc caatcagaag aagaatcgct ttctaacaaa caatacg 357

<210> 3033

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-F1

<400> 3033

agacaataca gaagttgtgc ctgttgcaga tgtcggagaa gttccaagtg tcgtgtttca 60  
ttttacaaaa atcgcgaaacc tggaaaacgt gaatgcagga gaattctgtg atgtacttgg 120  
aatagtgaag gatgtttcgg agttgtcttc tgttgtttct agaactactg gcagtaccct 180  
ggtcaaaaaga acagttgttt taatggacga taccttgaag tcaattcgac ttactttgtg 240  
gaaagataat gcagaaaaat tactcacctc tgctgaaggt aatcctgttt tgctctgtaa 300  
aggagttcga cgcgagagact ttaatggaat ctcatggat gccactactc agtcctgttt 360  
tgaagtaaac cctgatatta aagaggcaca tgagttgcgt gggtggta 408

<210> 3034

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-F2

<400> 3034

ccggctcgac cacgcgtcag cccacgcgtc cgctgacggt tactgtaccc aagaaacagg 60  
tggagaaagc agaaagccaa aagatagaga ttgcgaacga gtagagcacc ttgagtttgt 120  
ttgttgtgta tagataaaca ttgaggttgt gtttttattt ttgtaaaaaa aaaaaaaaaa 180

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
 aaaaaaaaaa agggggggcc ccccaaaggg ttcaactta attaaccggt aaaggaaatt 360  
 taaaaccctt caaaaatggc ccccaaattc aatttcccgg cccctttttt aaa 413

<210> 3035  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-F3  
 <400> 3035

agagaaattt ctacgcatac tttaaatagc catgtggatg tcggtgtatc gtgacaagat 60  
 cgtggattga tcaacaacca acgagagcaa gcgagctact atttggcgtg tcatcatgag 120  
 cgagttgggt cgacctgggtc gtttctttga tagcagtttt ggagacttgt tttcatgggc 180  
 aaccgaccct ttttatcgag atatctgggtc tatcacacca cgtagttttg aagggtcaaac 240  
 atgggtcgctt aggatagacc ttgtagagaa agacgactgt ttcttgggtga aagcggaagt 300  
 acctggagta ccaagggaaa agatcaatgt agatttgaaa ggtgatattc taacgataac 360  
 tgggggagaag gaagacgaga aaaagtcgga tgaagaacgg ga 402

<210> 3036  
 <211> 269  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-F5  
 <400> 3036

agcccacgcg tccgcggacg cgtgggagag gcggcaaaag gaacaaatgg ttgttttctg 60  
 tctctttctc actctcgata tatgtatata tatatatata tgtatgtata tatatattat 120  
 gcactgttgt catagtgtct gtgtaaaagc aacctattct ttatcgagac aacaacagca 180  
 gtgaccattc tcaactgaata aacttgttta ccaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240  
 aaaaaaaaaa aaagaaaaaa aaacaaaaaa 269

<210> 3037

<211> 407  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-F7  
  
 <400> 3037  
  
 agccacgcg tccggcaaaa ctgccctggg ataatgtttt gagactattt gaggcaattc 60  
 gtcttttgat ttgaaagggg tggaaagaaa tagagcctaa aaagtttccg ttgtctcttt 120  
 gaaactgttg aagagatttc tttgtcctat atatgcagtt gtaagagttg gagggtatttg 180  
 aaccaaactc gagagacttc gaggagactc ccttttacat agtgatcact agcacgcacg 240  
 caagtaattc tcccaaaata gggcagttgt taaaaacgat atcgaagaaa ttcaaactcg 300  
 atcgtcaacg aaactaagat cagggagctg aaatcgtgaa tggtgacgat ccagaggaga 360  
 cttgttgga ctgttaaaac aaagtttagc tatcatgcaa cttttca 407

<210> 3038  
 <211> 353  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-F9  
  
 <400> 3038  
  
 agacaacttg gccaaagacg gttgtcaaag tggcgggtgg ggtttgagtg gcatagtgtc 60  
 tcgcgttcag gttcacacgg caatggaagc gctttaaacg tataccgacg ttaggtgaaa 120  
 acaagtcaac taagagatgg ggtgcttctc aagtaaagac ttccaaagca acggaaagaa 180  
 aaagtacggt gtggtattga taggcttgga tggagccgga gcaaccacta tattgtactt 240  
 tttaaagctt ggaaagcaaa tgatgacaat gccaaccttg ggatgtaata cggaaactgt 300  
 gcagtacgga gatagcgaac tgggtgatatg ggatattgga ggactcgaca aag 353

<210> 3039  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-G1  
  
 <400> 3039

gacccacgcg tcagcccacg cgtccgcccc cgcgctccgcc cagcggtccg atttgagaac 60  
gagattgact cgttggaaga gaaaccttgg cgggaaaaag gtgccgaact aagtgattat 120  
ttcaactatg ggtttacgga agatacttgg agagaatatt gtagaagaca acaaatgatg 180  
agactttatt ctcaaagtct gatgccatt cgaactttag actctggcgg tcctttccat 240  
aataaccaac ctcatatta tcatcatcat aataataata tggactcatc cggatgaacca 300  
agtcgtaagg taccacgagc gacacaaaac agaagataca atcctccgcc tccttataaa 360  
agtaacctga aacttcccaa tgaggcaacc gaagccgtgg actatgcaa acccaacgaa 420  
tac 423

<210> 3040  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-059-Q1-E1-G10  
<400> 3040

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ttatggcaac ctgaaattag ggagctcatc agtcgtttca agacagaagt ttccttgaat 120  
ggaaaagaga gaactttacg gtacattggc tcaatggtag ctgatgttca tcgcacactg 180  
cttaatggag gaatttttat gtactttgcg catcaacaat ggccaaatgg aaaattaaaa 240  
ttactttatg aagcttcgcc tttggcattt attatagagc aggctggagg aaaggcgtca 300  
actggtcttg aaagaatatt ggacattact cctacaagtg ttcacgatcg tattcaagtg 360  
gtgattgggt cctatgaaga tgtagaattg gttgaacagc ttacanaagg accttcaaca 420  
agtgatccta 430

<210> 3041  
<211> 381  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-G11  
<400> 3041

tacccttca gaagatcaag tacgagtctt gctctgctca atatgaagtt caaagatca 60

agcagcaaca atgtactatg acagtctctg aacaatacat acagcccgat acttgctaca 120  
 agtatgtccc tgaacaacaa ttggtgcctc atacttggtta caagtattat tctgtaccca 180  
 agttttattga aaagtgtctat cctcagtatg caacaacgga gaaatgtgta gagtatgagt 240  
 atgttccata tgccacttct acaccttatt catcggtatc tccaagttat actccttcag 300  
 cataacaaac aacttccggc taataaaaaa gccgaaaact ggatagattt ttgaagtgtc 360  
 tcgtgttcaa agaaaacatg a 381

<210> 3042  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-G12  
 <400> 3042

agccaacgcg tccggagaga aaaactatct tgcaagcaaa tgaggaaaat attcccaaatt 60  
 taataaccaa tcctcgtggt gtgaagttca tagtacgtgg ctatttgcatt tatattcgaa 120  
 aagaagggaac cttgtggtat actgagatc cagaggacaa caagaagggtg actaaattgg 180  
 atgaaaatcg ttgggtttgc gatgctacag gaaaggagta ttcttattgc aactaccgct 240  
 atattttatc cggttgcata caagatgcga ctggttcttt gaatgctaatt gcttttgatg 300  
 atgtcgggtc ccgcctaatt ggtcgtccag ccgaagattt agccgctata tatgaacgtg 360  
 acaaagcaga atttgatgca ttaattgatg acgttctttt taagccgttc atctttcgaa 420  
 tac 423

<210> 3043  
 <211> 108  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-059-Q1-E1-G2  
 <400> 3043

agggcaaatt caaaaataag ttggcaaaaa aagggtccggg tcccaccccg taccggcaag 60  
 aaacttaccg gctttggcac gtaacttttc caaaggccgg ccccccaa 108

<210> 3044  
 <211> 383  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-G3

<400> 3044

gaccacgcgt caggtataca taaaatacaa acaggcaaaa actgcgtctc aggactcaca 60  
 agaggcagta tataaggcaa gaaatttcac gggattacgt ttcaaagaac gagtcctcta 120  
 aatgtgggca ggaaagtatc tgaagaacag acttgtaagc accgtacctt tgcataatgt 180  
 cccaccgagt gatagaagaa gcaaacagga agataaagaa ctatccatcg aaagaccgga 240  
 atctaattga tcttatgctg tccaatccaa gtaacgctga accagtatct gtggaacaag 300  
 atttggtata catggcataa cgggtgatat gccaaacaaa gctattgata tctggtagcg 360  
 ctcgaaagct atataagtag cgt 383

<210> 3045  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-G6

<400> 3045

cgaccacacg tcagcccacg cgtccgcaaa tgtggacttg aatttagcga tgtgttttag 60  
 tttttccctt ggttctcgac tctgttggg acgacaactt gagtagcttt ctctcathtt 120  
 gtcaaagcag tcttcttggt cttcttgctt ccagtctttt gttcgcgact agcctgcttg 180  
 atttgctttt taaaaaggtt acagagtgat gtatccgccc ctatttggtt tggtcccttg 240  
 aacaaagaga taggttggtt aaagcaagat aaggaagcgt ttgatggact tgaagaaatt 300  
 ttatatgcgg tgcaccgcca cgaaagcgcc ccaaacgaac gtccttgac aagagagatg 360  
 gacggtctta acgccaacag ccgaggactc tttgtatagc aagtgcctgt ggcttt 416

<210> 3046  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-G7

<400> 3046

agcggacgcg tgggcgacg cgtgggcgga cgcgtgggcg gacgcgtggg cggacgcgtg 60  
ggttacattg tgggttgtgg agtaagtgcg cttggcaaca aactaaaaga tggaagaaga 120  
atcatcggag cttatatgtc tgacgtact gtagcgtctc tatttagtgt gaaaatgttg 180  
ttctacctta caatacttgc gttctctatc actattgtgg gtcttatggg taagagtcc 240  
gacggtatctt ggggttcacag tgttccagcg aaatacgaat aatgggtcaat aaaattcttc 300  
ccttcaagta aaccaccacg gcataacttc ctattgcaag tatatcatgg ctgtagcagc 360  
tattggtttg gttatcagct tcttcagatt ttggtatgca ttcctcg 407

<210> 3047

<211> 421

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-G8

<400> 3047

tcgaccaca cgtacgtgtc atttcaatga ttggtctaaa cagaactcga aagaagtgat 60  
ttcttaatac gtatgaattg actcaaaatt tgtctaccga caacttcagg agtataacta 120  
gccataataa ttctctttgc ttctagtaca cggaggcgaa ctgtatctct gtccaaaata 180  
acttgtcgca ttctcaacct taaatgagag atggaaggaa cggctaaatg taaccctttg 240  
taaacttcca tctctgcact gtttccagaa taagtittcaa gacgttctac tctaattgga 300  
aaaccggttt ttctccaaa atattccgta tgtccgctcc agttagtagc aatcactggc 360  
agttcgtaat atattgcctc catgataaga cgtgccacgc ctccccctca tgttgccaaa 420  
a 421

<210> 3048

<211> 357

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-G9

<400> 3048

cacgcgtcag cggacgcgtg ggcgacgcg tggggacatg tcgaacgaca atcagtctga 60



taagagcact ttgaaagaag cggaggagaa gctgcagagt gcagttcata ctggaacaga 120  
gaaagtttct caggtgttga gcgacgtcaa ggaaactgtg acggagaaat acaaggaatg 180  
gacagcacca aaaagtagcc aagaagaagc aaaagaaaaa gcacaagaag cgaaagaaga 240  
ggctaataaa gcttttaatg ctatgaaaga aagtgcgagt gccgcttcag aggctgcac 300  
agagaaagca gaaaaaatta agcaggagtt gaaggagtga agatacacag tagtttt 357

<210> 3049  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-059-Q1-E1-H1

<400> 3049  
agtcaacatt taataatata attgtaaaca taacagatat aaacggtaat actattgctt 60  
gggtcttctgc tgggtcaagtt ggatttaaag gagctaaaaa agccacacct tttgcagcac 120  
aaaccacggc tgaaaaagca ggtaagcaag caatagaaca tggaatgcgc caaacagaaa 180  
taagaataaa tggctctggg tctggtagag agactgctat tagagcttta caagcactgg 240  
gtttgaaaat aacaaccatt aaagatataa cacctatacc tcataatggg tgcaggcctc 300  
ctaaaagaag acgtgtttta aagaactaga tataatttat gttattttat tatataatta 360  
tatgaaaag ttacagattg aatgtctaga atcttttaat canaacccaa caaa 414

<210> 3050  
<211> 439  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-H10

<400> 3050  
cccacgcgtc agcccacgcg tccgccacaa ggcgccatca tgagcggaga agggacacaa 60  
ggacaattgt ttcttgggaa tacaaaacaa gtaattgaga atccgaggca gaataacgat 120  
gatcgaccca gtgtttatgt caatatgaca gatgacgctg ttagttggct gaagaatact 180  
tttcaaggag ttttgaaacc aacaaatcct gttgcttcga acaacagtaa taataataat 240

agcagtggta tggaaactac ccttactgcc aacattgtac agcaaattgt aaagcgactt 300  
gctacgatgg agtcggagct tacagagttg cgggtcaaaa atagcgctct tgaaagagaa 360  
cgagaaattc ttcttatgga gaatgagagt ttacgcaaag tgttggaaga atggaaaaaa 420  
ggtggaagac ctgtatgaa 439

<210> 3051  
<211> 339  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-H11  
<400> 3051

accacgcgtc agccacgcgt ccgtttcgtc catcgtgcac aacgtccctg gcaaagtcaa 60  
gtagaacctg cagcagaaga gcagaaacct acctacgacc ccaagtgtta tctgtgcccc 120  
ggaaacagtc gtgcgggtgg gaagcaaaac ccgaaatatg acgaaacttt tgtgtttaca 180  
aatgattttg ctgcactgtt accagatata ccctcctttg aacaacaaga tggcgctgat 240  
caagatttgt taaaagtaga aggagtcaag ggaacctgta aagttatttg tttttctcct 300  
cgacacgact ggactgtagc tgaaatgtcg gtggactct 339

<210> 3052  
<211> 391  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-059-Q1-E1-H12  
<400> 3052

ccacgcgtaa gccaacgcgt ccgcccacgc gtccgttaaa tactaacttg gttgcttagt 60  
aaatttgcac gttatgaaga agctattcaa aaccccagga aggatgttct tttcttaacc 120  
aagacttttc aaagtgaagt tcaccgaaag gccatatggc ttcgagaaga cttttgtggc 180  
actgcagcta tatctcgtga atttatccga tcagactttg aaagatttgc tgttggagta 240  
gatatagatt ctgtagctat agactgggtg ctcaaacaag gtttattgag tcttccgtct 300  
ggtagtgata gacttgagct agtagtagca gactgtagag agtatgagga taaaagatcg 360  
tatgacgtta tttctgccaa caactatagc t 391

<210> 3053  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-H2  
 <400> 3053  
  
 agattatgga gaataagact gtaaaagaac taaaattcct tgttggtccaa ccaacaactc 60  
 tctcaaaaaa ctaaacacaa atagccaaat aactggtgaa atatctaccc caccactgg 120  
 ttgtgctacc ttctgaactg gagcaaggaa aggttccgta accaaacata cccacaccca 180  
 cggaactttt agactatact ttttaggata ccaacttaga acaattcgca aaaccatcaa 240  
 gatgaccatc actgaacaac tccagttggt gatggttgca acatagccca ccgccgtatg 300  
 caccttttgt tcccaatag aagcagcaac tctagctatt gtgcttgctt gagagtcgtc 360  
 cccaaagtgg tcgcttttca ttgaccaatt gtacgaaagt ctccactt 408

<210> 3054  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-059-Q1-E1-H3  
 <400> 3054  
  
 agcccacgcg tccgagttag ctcaaatgt tttaaagac catcgggcat ccattttcac 60  
 atttgtgttt gttgaagagc agcatgatga agagcgctat gaagttcttt gtatttagca 120  
 ttattttggc aaatgttggt cttactatc aagcagcaac ggttttggag actttggagt 180  
 cactgaaata tacagagtat cttgacatgg taaaggctgc aggcctggac tcgaagttca 240  
 acgactctgc tgttacatgg actgtttttg cagcaaacia tactggagtc aatgccacct 300  
 tggcaccaaa gcacttggtt atttctaata tcacatctaa tgcgacggag agcaaagaca 360  
 ttgtggaata tactttgtac aaccatactc ttttgtcaga tgatat 406

<210> 3055  
 <211> 403  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-H4

<400> 3055

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tggtatccga tgctcaatat tctgcattcc gggaacaatt aaaagcgatg ggagtgtcga 120  
ataatttgag ccacatagga gaaaagaaga aagaaaagaa tactcgattt gttgctgttg 180  
gtttgttgca gaactgtaaa gtatttcata cgagaagagg agactgtatg gcaaattttg 240  
agttgagaga tgcgactgca gtttgtctag tcacaatgta tccacgagta tatgctcgag 300  
tatctcatct tttgatggaa aatgaacact ttgcagttcg tttaaatgtg gagtgggaga 360  
ctggaaattc cagtcaattg attgtcaaga acttggtctg act 403

<210> 3056

<211> 353

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-059-Q1-E1-H9

<400> 3056

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aggcaagtag agggcgggccc gagaaaggag agggcgtaag acgtgataca gagtaggaag 120  
aaaagagaag agagctagaa aggaggtaaa agaagagtaa aaggactaga agaggtagcg 180  
aattcacgag gaaggagcgt gaaggaagga ggaatcccaa gtaatcgagg aagaaaaagc 240  
ttcggtgaaa gcgtgaacgg attttgtaca cactgcccgt caagttctgg aagtgtgcta 300  
ggaataagca ggaaagtatt tgaagaagag agtgtaaagc gcgtaccttt tgc 353

<210> 3057

<211> 336

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-A1

<400> 3057

cccacgcgtc cgggaggtgg ttcaggagat gaaagttacc acgcaaggga acaagaaaag 60  
tttttgccta ctgccaacat tgcaagaatt atgaaaaagg cacttccacc aaacgcaaaa 120

atagcaaaag acggcaagga taccgtccag gaatgcgttt cagagtttgt aagttttata 180  
acgtcagaag caagcgacaa gtgtcagcgt gagaaacgaa agactataaa cggtgacgat 240  
atatttatggg caatgaacac gctgggtttc gacaactatg tagagcctct taaaatctac 300  
ttggcaagat atagagaagc tatgtctgca gagaag 336

<210> 3058  
<211> 349  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-060-Q1-E1-A3  
<400> 3058

gatcacgcgt cagtactttg gctggttctg gtgcattccc gataggttga tgtaacaaaa 60  
gaagttagct ttggagactc taccagcttc tgttatggaa cttgtggaag acgagtatgt 120  
tgcaatcgcg ttattgctac tttttgagca taacagagga gactcatctt tctttaaatc 180  
atattttggac atattaccct cacacgacga aatcaacccc ttgttttggg ggtcagatga 240  
agatttactg ctgttacaag gcagtcacac tttagctgct tgtcagcaac tgagagaaaa 300  
acttgtgaga gagtatacat atctagagaa ccatattatt ccacaaatc 349

<210> 3059  
<211> 169  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-060-Q1-E1-A4  
<400> 3059

cgcgtcaggg caacattgcc atttcctttt ggagggaaaa cacaagacaa caatgtctcg 60  
tcncaagtgt ttctttgata ttgctatcgg tggacaacct gcaggaagga ttgtattcga 120  
gttgttctcc gatgtcgttc ctaaaaccgc ggaaaatttc cgtgccctg 169

<210> 3060  
<211> 381  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-060-Q1-E1-A6

<400> 3060

agcccacgcg tccggtgctg ctctttggac ttgccgccta tttctctata cagttgtggt 60  
agcattttca gcaacaataa ttggacttga tggaaggaag gcagataaca tatggaacga 120  
tgccctatat tatcatggaa aagtgggtgaa cttttgtgca tattcggtt cgtctgtttt 180  
tgaaggtggc gaccatggcg catgtaaata tgtgatggct ttggcttcta tcagcttgat 240  
tttagttttc tttctttggt tggcctcctt tgtcgacgca ttgtatccaa ttcttataaa 300  
gttctgggtt gtggagcttg gtatcaacat attccttact atgtgggtggg tggttgggtgc 360  
aattgtgggtg actgcaaagc g 381

<210> 3061

<211> 372

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-A7

<400> 3061

agcgctacat aaaggagcac caagataata atgacacaag tgaaaacacg tcgaccgaga 60  
aaaccacttc cagcaacgat aagatagcac ttgaagttga gaagacagaa tattgggatac 120  
aactctacaa aaacaacagg aacaaagagg aaccaaagga accagcatca gaaaatatga 180  
aaggaagtgc gtcacaacaa ggttccaagt caaatgttgg ttatcctttg gaagaccac 240  
aggcagtcca acaggaagag gagacgccgc aagttgttga cgacaatgag acaaactctc 300  
ctcatgcaat tctacttgaa gctagcaaac tgcaagcaaa atatggagat tgtgataatc 360  
ttccaaacca ag 372

<210> 3062

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-B11

<400> 3062

ccacgcgtac ggattccctt ggcagcgatg aatcaagttg caaagatttt agagatgccc 60  
ccgataagag tctatgagat tgtaacattc tattccatgt tctatcgtga acctataggc 120

aagttcaatg tacaagtttg ctgtacgact ccttgcatga tacgcggtgc gtatgatatt 180  
 cttcgtgcc aacaggacaa gttcaatctt gaacccgggg gaaacagtcc agatatgatg 240  
 tttcatcttg aagaagtgg aatgcttagga gcttgtgtga atgcgccaat gatgcaagtg 300  
 aatgatgact actatgaaga cttgactgtt gaaagcgcca ttcgagtatt ggaaaatctg 360  
 cgtgataaca agcctgtgaa agtcgggtcct cagaacggtc gtcac 406

<210> 3063  
 <211> 360  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-B2  
 <400> 3063

agcccacgcg tccgcggacg cgtgggcaac aagcggcggg ctcaaagggg gacaaaagtg 60  
 gaggcgggct ctccgatgct ctgatgaatg gcaacttttc ctttatctct ttgggataac 120  
 ttctgtcgtt ggactttgtc cgaatatttg actgggggtt atagaatatg acctttcgat 180  
 attttctcca tgcattgaca acatgtgtac ataaatatac caactttgtt tgaaaacatc 240  
 tttatggacc agtaactgtt ggaatgcctc tcccatcaaa agactaggac ttggtccaag 300  
 caatgattgt gggagaaata ttgtttccat tagttgcttg ggcttcagta tagttggtgg 360

<210> 3064  
 <211> 353  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-B3  
 <400> 3064

ggtcgaggca cgcgtcagcc cacacgtccg attcatcggt tcgtcttggg ttgacaaaga 60  
 agactggaag ttttttcggt gtggaagaag acatattttg tttgaaccag ttggaaaagt 120  
 atgtttgaca gatattattg atcgactcat tgtgtcgtag ctttcatgct ctctgggcaa 180  
 acttttacgt gtacgtaata agaacactcg tcagttttca actttgagtg tggaagagga 240  
 gcagcgcttt gtgagggaa tttttggcgc tttttgggt ctttcttatt tgccacaaac 300  
 aaaagttgtg tctgtttcgg cagagtttct tcataagctt tccagtcgc tct 353

<210> 3065  
 <211> 368  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-B4

<400> 3065

aggaggtata cctagtgaag tatggggacg attacgtaca cctgttttag gaattgaaga 60  
 ggctgaagat tccatcgaaa ttgctcgaaa acacgccaaa ttggaccctt ttcttgactc 120  
 ttatgtgaaa tacagatggt gctctctttc cgagttgggc tccgaacgaa agcaatttga 180  
 ctgtgtaact tgtctggaag tagtggaaca tgtggaaaaa cctcagcagt ttctcaactt 240  
 gttggaggca attgttcgac cacaaggttt gtcattatc tccacgatta agcgcacggg 300  
 cacttcttgg ctaactgcga tatgcttggc ggaaaacgta cttgggtgga taacgcgtgg 360  
 aacgcac 368

<210> 3066  
 <211> 365  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-B5

<400> 3066

agccccacgcg tccgcccacg cgtccgggtc tttcaggctc gcttagaaag tgtttgcgtc 60  
 caaagagaca aagtttttga acaattggcc aaagtctgag agttgagaag aaatcttggc 120  
 gtccttcttt caaaagcacc ttctcacgta caggtaaaca ttggctgtga cttttatctt 180  
 gacggcgagt tggatgacga aggtctttta cttattgaca tgggaaagaa cgtctttgtg 240  
 gaaatgcaac caaaagaagc tctagagact acaatactga gagaaacttg gctggagagg 300  
 ctcggtgaat attatacgaa aaggtggaaa gattgagtta agctcgttgg attgctctac 360  
 tgact 365

<210> 3067  
 <211> 379  
 <212> DNA  
 <213> Cyanidium caldarium



<223> Clone ID: LIB190-060-Q1-E1-B6

<400> 3067

cccacgcgtc cgcccacgcg tccgcccacg cgtccgaaag cagttgagca cagcaatatc 60  
gatatgtcaa gtggctggaa taactacagt ggaacggaag gtaatgggaa tgctgggtgct 120  
gggtcaaggga agaacaagga taagaagact agtggagaac ttgcaaaaga tagttttaaag 180  
ggtttgggaa tggcagcctt gtcagcgggt aagctggttt atcgcggtgg caagtgggtgt 240  
gtggataagg tggaaggcgc cattgacgac cacaagtcaa aaggaagtaa gagtggccgt 300  
ggtggaatt caggttattc tcgttgaaac gtaataacgt ggatagaaac agaacgagac 360  
ggttttttat atttgttgt 379

<210> 3068

<211> 97

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-B7

<400> 3068

agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gcagaagaac 60  
aatagagata taaaattaaa tacacgaaca agggagg 97

<210> 3069

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-B8

<400> 3069

agcgtagaac aatatgttga tacctaaaaa gaaccgaaac gcagtttatt cttttatattt 60  
atcgagtgga gtaattgtgg tgaagaagga cactcatgcc aaaaaacact tgcagcttga 120  
cgttcctaatt cttgaagtta tgaagatatg tcagagtctt acttcgctgg gatattttaa 180  
ggaacagttc agttgggggtt acttttatta tactctgact gacaacggaa tcgattactt 240  
acgtcgatat ttgaatcttc ctgtggaaat agtcccggaa actctaaaga agcctactag 300  
acccccaggt gttcgccctt cgtcgtttcc atcagaaggt caagaaaaga ga 352

<210> 3070  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-C12  
 <400> 3070  
  
 agcacacgcg tccgggttat cgtgtggaag atagcgtcat tttattcgat ggagagtgtgta 60  
 acttgtgtaa cggatctgta aactttgtcc tcgaccacga ccgacaaggc atattcaagt 120  
 ttgcagcgtt acaaagtcct gttggattgg cactgttgaa aaagtatcgc ggaccacag 180  
 acctttcgtc gctggttctc attgaaaaag gtcgaatgct tctgaaatcc gatgccgtac 240  
 tacgaattgc agagttgttg gacaatcaga ccttcgtat tttggcagtt gcaaccagag 300  
 tgggttttcc gaggtggttg agagattggg tatatacaga aattatatcc aaatatcgac 360  
 gtcaaattatt tggagagacc gatgtttgtc gtctg 395

<210> 3071  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-C6  
 <400> 3071  
  
 agaggaacct tgtttgggag atttccagat gatatttatg atggctatac tagtaacgtt 60  
 ccaggaaatc cgtggattct atgtacttta ggaatggcgc aatattatta tgagttggca 120  
 gcagagtggg tgaacatga aaagattgtc ataggaaagt ggagcaaaga ctttttcaga 180  
 catttgaggg ttatgcctcc tctcctcct cctcctcctc aatcttctat atcaacgacc 240  
 attactggaa aagctatttg tagttatgtt tctgcgctat tagaagaagg agatcgcgta 300  
 ttgaatgcta ttcgaaagca tacagttcct agtggtatgt ttacagagga gattgatcga 360  
 tatactgggtt t 371

<210> 3072  
 <211> 361  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-C7

<400> 3072

gagccattgg ggcgacaaca ctttggtgca gtgttgccag tgtcagtaga agaaacataa 60  
caagtccaaa ctttttggac tctactttga tttctatcta gactggcaat gtaaataagaa 120  
ctgagagtgt caagttaccc ctttttgctg gtagagagta acaatggggg tgcgttacga 180  
agacggcttg tctacgcagt cgtcgacaca agaaaaaag acagaccagg tcagaagacc 240  
gaatgtgact cgataaagag taaacaagcg tagttcttgt aacggagcaa ccgctgattc 300  
ctcttctaca tagccagctg gttgtgtcaa cgtctcctgc gtaggttggc tacggtataa 360  
c 361

<210> 3073

<211> 147

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-C8

<400> 3073

gaaagttttc tacaatatcg atttcgtttg gtaaacaatgt ggtttccttc cacagcactc 60  
gcatgtgaag atagatatat gctgactagg gttcgagcat ttgcatatta gatgaagtcc 120  
tgagcattgg gatgtaagct atacgtt 147

<210> 3074

<211> 159

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-D2

<400> 3074

cccacacgtc cgagaagggtg ttgcacggct gtcgaaagaa cgtgctgtga agtgagagaa 60  
cgtacgagaa agccaagtga ggaaaagaag gcaagtagag ggcggcccca gaaaggagaa 120  
ggcgtaagac gtgatacaga gtaggaagaa cagagaaga 159

<210> 3075

<211> 253

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-D6  
 <400> 3075  
 gcaagaagag aagagagcta gaaaggaggt aaaagaagag taaaaggact agaagaggta 60  
 cggaattcac gaggaaggag cgagaggaaa gaggtgtatg atgcaagcaa agaagtgacg 120  
 cagtagatca gagagtaaca catgcaagta cgtaaagcga accggtgaat aaagagggtg 180  
 gaaagagtgg aagaacatga aagcacagaa gaatgtaaga aatgggttaga gtaaaaacca 240  
 taaaggaagt aaa 253

<210> 3076  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-060-Q1-E1-D7  
 <400> 3076  
 agccccacgcg tccggtggct tagaagaggt caaggtggaa ctgcaagaaa ccgtacaata 60  
 tcctgtagag catccagaga agtttgaaaa gtttggtatg cagccttcaa aaggtgtctt 120  
 gttctacgga cctccaggat gtggaaagac tttacttgcc aaagcaattg cgaacgaatg 180  
 tcaagccaat ttcatttcta tcaaaggacc tgaactgttg accatgtggt ttggtgagtc 240  
 agagcacaac gttcgtgaag ttttcgacaa ggcacgacaa gctgcgccat gtattctcgt 300  
 cttcgatgag ttggactcta ttgcgagatc tcgangatct tctgcangag atgccggtgg 360  
 tgcaggcgac agagttatca atcaaat 387

<210> 3077  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-060-Q1-E1-D8  
 <400> 3077  
 agcgagttga aagagactag tgaagctggt atcttttact tgaaatcttt attggatatt 60

tgtgcacaga ctgaagaaaa cgtcctttca aaagatgac tttgttcggt gaaggaggct 120  
 tctcgtaact ttattgaatc gaaacaaaaa gctcgtttac atagtgaagc taatagaaac 180  
 tgtcataaag tggctgtaac tggagctgg agaagagaag aggcctccatc gaaccacagt 240  
 gtgttcgata cagcttacga aagtatagtc agtaatctac gagatgaagc tagcgccgac 300  
 caaagtgaag aattcaagag gcttttaag tccatagaga catttgaaga aggagaagta 360  
 gtttctcag ttcttgcaac cgatgagaaa cagtttatnt tgcccctttc aaaaagcta 420  
 c 421

<210> 3078  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-D9  
 <400> 3078

agcacacgcg tccggaaaga ggtcgaacca gtcgtgaaac acttgagct gtccgtggaa 60  
 actttcggaa gcaatacacg tcgtttggcc tcttgctttt tctccattct gaggagacta 120  
 tacaaggctt cctctcaagt tgcagattcc ttttggcagt cgccacatca ccaaactact 180  
 tccccttctt cttcatctgc acatggggaa cagtcgtgga gttctataag ttcttctgta 240  
 caggatatgc cgatatctag aaggtttata ggatatatgt tgcaagtaac gactctgttt 300  
 atggccttgc tcattagttg tttccgtata gttggctatt ttctggggaa tatgaaaaca 360  
 gaaacgatat acgttttcaa cagagtgaat gctc 394

<210> 3079  
 <211> 206  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-E10  
 <400> 3079

tcccggctgc cccacgcgt acgaatttaa gaattcattc cagaaaactt aacttgggaa 60  
 gtgaaattga ctacgaagca gtaatcaatc ctgcaaaaag gtttaattga aaaaattgc 120  
 caaataattg gacaaaggcg gggttgtttg cccctcctgg aaatagagac aaagtgaagc 180

atgaagacat tatgaacgcg aattcc

206

<210> 3080  
<211> 380  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-060-Q1-E1-E11  
  
<400> 3080

agaatgtgcg gcctgccaaa tagtagagaa gaaatcgatg aaagtgaaag cgagtaaaag 60  
atgagggtata gagaatggcg gtcctaactg taaggatcca aaggtagcga agtaaataga 120  
cgtttgaaag gcgtccagta tgaaaggaga aacgagtgtg gcactgtcta gtcgtccaac 180  
tcagcgaaac agcaataact gtgaaaatgc agtaaactag cagtaggacg gaaagaaccc 240  
ataattcttg actagatagg tttagagagg aaagaggtgt atgatgcaag caaagaagtg 300  
acgcagtaga tcagagagta acacatgcaa gtaggtaaag cgaacgggtg agtaaagagg 360  
tgtgaaagag tggaagaaca 380

<210> 3081  
<211> 390  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-060-Q1-E1-E12  
  
<400> 3081

acggacctaa ctgtagtctg ggtaactgtc tttcgtcagt ctttacgtga acaaagcccc 60  
tctttttgta gaaactaagg ctttacgtca taaaacccat acattagtgt tcttgtggca 120  
cacttgcca gatttggtga ataataacca aactttgtcg cggtcggcag aaaatgacca 180  
aggcggcagc ttccaccagt gtaaagcaac tggttccaaa aaactcggac gataagaatc 240  
gaccgaataa agtgccttct aatcaaataa ggtctcgttc aactataaac cgtctaagac 300  
tttatcgga aaaagcatat caatataata agcatggaaa acgtgtatca ggagcangag 360  
attatactag taacatccca cagcctgggtg 390

<210> 3082

<211> 352  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-060-Q1-E1-E5

<400> 3082  
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 tgtgcagcgc ttctcaatca cttgaatggt ggcaattggt aaaggaaaat gtagaccctt 120  
 gcacaccaac agataaacca aggacaagtt ctaaaaagga caagacaacg cttcctaggc 180  
 gaactccatt gtcggatatt acagagttgg tggtaggttc caacaagaaa taccaagata 240  
 atacgcaaca acaaccacaa ccacctacaa gtttttaccg accattgccca ccanaatata 300  
 aagagaaacg actcttgtct cttcgataag accatggatg aaaatgtgaa ta 352

<210> 3083  
 <211> 396  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-E7

<400> 3083  
 gtggttggtg gtggatggga atgttaggaa gcctctggtc atgggcaact ctatcggtc 60  
 tacctactcg gatgacatca acttgccaag aagaagaagc agttcaggac agtctatagc 120  
 caccactagg gaatcctttt cccgtaccag caacagttct agaggcagcg cggttggttga 180  
 cccaagaaca atggttccac gaagacaaag aagaaggatt actgctcgaa gaaatgacgc 240  
 agtactcttg tctcttagtc gacttatagt ggaaactggg aggcgcgcgg attgggtaga 300  
 tgtgagcyag tcgtgggatg aaaagaaagt ggaaaccttg gtggacgcca tgcttttggc 360  
 gccaaagacag caggggcttg acgaaacttg tggaga 396

<210> 3084  
 <211> 275  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-E8  
 <400> 3084

gttttcttgg tagcagttgt acattcaaca tcatcaaatg ccaaagggag gaaagaaaga 60  
 ttcttcaaag aaagaagcca caagtaaacc tgcagcagca gatgctacaa agacgacaga 120  
 aaagtctggt ccggaagcca agttgaaggg aactgggtgca aagaaacaat aaaaagttga 180  
 ctatgcatgt gcagtcctgt tatgttttgt gagttctgtt tgatagtttc cagctattct 240  
 tttggtagtg aataaagaga aaatttttta tattt 275

<210> 3085  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-F10  
 <400> 3085

acgcgtcagc aaacgttatc ttactccagt gattgggtgg tttatgggta ttcttatttt 60  
 gaatgcaatg tttttagggt cattggctcc actgaatagc tgtgcacgac tcatatttgc 120  
 ttttgcaaga gaggggtctta tatttccaaa gatattcgcg acggtggata tgaaacaaaa 180  
 tectatagta tccaccgctg tagttgcttt tcttgctgcc atcgtgtctc tcattgcagg 240  
 tttggcgatg ggaacatata atggctttgt tatgttggtg acaacatcat cgctttctct 300  
 ttatgtgggt catattattg ccaatcttac tttgggtatt ttctatcatc gtcaaaagca 360  
 gctcaactgg a 371

<210> 3086  
 <211> 418  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-F2  
 <400> 3086

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 gcgccagcca aggcaacca caacttgtct tgtgtatcgc aacacattcc atcaaaaaca 120  
 aagaattcat tacttgtctt tttatccaat ccaacaactt tccgctctct ttccttgtct 180  
 atttctctg tatgaatatc ataaggatag caaagaatct catactttcc agaatcgatg 240  
 tagaaaagat gttgcgaatc actcaaccaa gtaagaccat tgctacaaca tattccccga 300



aatatttgtc gcgatgttat cttacccaaa gatttcctct tgggtgcttac gcgtttccca 360  
gtgtcatcct tgcggtgtcc ttgagaactc ctgaaggaat aaaactttcc tgtgcttc 418

<210> 3087  
<211> 357  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-060-Q1-E1-F4

<400> 3087

aagtattgca agctgtcgaa agaacgtgct gtgaagtgag agaacgtacg agaaagccaa 60  
gtgaggaaaa gaaggcaagt agagggcggc ccgagaaagg agagggcgta agacgtgata 120  
cagagtagga agaaaagaga agagagctag aaaggaggta aaagaagagt aaaaggacta 180  
gaagaggtag ggaattcacg aggaaggagc gtgaangaag gaggaatccc aagtaatcga 240  
ggaagaaaaa gcttcggtga aagcgtgaac ggattttgta cacactgccc gtcaagttct 300  
ggaactgtgc taggaataag cangagaagt agaagagagt acgaaaagaa gaaagga 357

<210> 3088  
<211> 403  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-F5

<400> 3088

agcgattcca agacggcgca gtaatcttgt tctccacggt agctcgctc gacagaaaaa 60  
gacatgttga gctggctaca aaaaaaccac ttgctagttg caatattaca agtgtcaaga 120  
atgtttactc tttatcgagt cacagtgcgt cttttcccct aatcttctt tttcgggtgc 180  
gacgagtgcg tagacatgct gtcttggtta cgcaaccctc tattgacact ctaggtttcc 240  
tgtgcagcgt cgaactacct aaaacgcaaa gcagcaaagt cccaaagttt cgactctttt 300  
tgttttctcc actagccata ttgaacaaaa gtgttttgca ccacttgcca cgacaacgaa 360  
tggttcactc tcgtgtgttt tctcttgaca aaactcgaag act 403

<210> 3089

<211> 309  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-F6  
  
 <400> 3089  
  
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 ctgtcggttg ttagagactt ctcgattctc cagatgtgcc aaagccaaga ccgtctcggt 120  
 gcgacgtagt tcccagtgtt cacactcttg gaagagtgtt tcgatgaact acagtcccta 180  
 ttcgataact accgacaagt cagaaggaca tattgtcccc ggtacttttt caagatttga 240  
 gtttcctgaa gggccaatca acgggtccaaa cgtcctgaac cctaacatac ctgaccttac 300  
 agtgtccaa 309

<210> 3090  
 <211> 356  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-F7  
  
 <400> 3090  
  
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 gcaggctttc tttccacacc aaaagttgca gcagaagatt ggtcagacac gtatatgggg 120  
 gactttacga gagagggcgt caaggacagc ttccgacacc tttttttgcc aaacaactct 180  
 ccaggccttg acccgttttt gacgaaagaa aactcagtat ttggctcacc tacagaacct 240  
 cagttagtgc ctgagtgggt tccttttcag gacagttctt cggagaccaa cgtaaattgg 300  
 gtcaatttga acagctcccc tgttcaaagt aacgatacga cttgttccgt ttcaag 356

<210> 3091  
 <211> 342  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-G1  
  
 <400> 3091

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tcacaatata tcaaagctgg ggtcggacct gatgacttgg aggagatgta taaacaagca 120  
cacgagcgta ttcgagcaga tccttccttt gagaagaaac caaagcgtga agtaacgaag 180  
catcgagctt ttcgtcagag aaaactcact aaagaacgtg ctgtgaagtg agagaacgta 240  
cgagaaagcc aagtgaggaa aagaaggcaa gtagagggcg gcccgagaaa ggagagggcg 300  
taagacgtga tacagagtac gaagaaaaga gaagagagct ag 342

<210> 3092  
<211> 354  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-G5

<400> 3092

aggatgaatgc agggattcct atgaaggatt tgatcatttc atgttcatct ggatacatgg 60  
agaataccac agtgatggac ttgaataatg tatacacact ggtgaggggt cctcaactta 120  
cgttggccat ctaagcacat tctggaacac tggcattggc tcattgggaa tcgaaagctg 180  
cttttgaaag ttttgagcac ttaattgcag ttgctaaaga gggatgtcta catatattgg 240  
atgtcatcca ttccaatagt gagcaataat ctattgcgac tgattgcttc tcgcgatact 300  
atttcaataa agtgatccta ctcttaatca tcatcatcat gactatcctg tgat 354

<210> 3093  
<211> 350  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-G7

<400> 3093

cgccaatctc gactgtatag cagaagaggc tttcctttta gtggtatgtc cgttgtagag 60  
tccttatcgg actgaggaag gaatagcgtt tgggcacata taaagggttt tcgcaagtgt 120  
tagcttgga gtagatttgt aaactggcaa acggaatgat tcaccacttt cttataacct 180  
cttcaagtgg tttggttttg tattccacag agtttacgac tactcttgca caaccacgct 240  
tagttgggtc actgctaaca gcacttggtg aattttcaaa gaaaaatgtc tctctgcctg 300  
tttcatatat tgaacttgag aaagtcgccg tggcggtttc tgtcagtgag 350

<210> 3094  
 <211> 360  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-G8  
 <400> 3094

aggacgtcgt cgactcatgg cacctaagaa gacttcgaaa gtagcacctc ctcctgaagc 60  
 tctgggttaaa aaagaaaaaa aggagaaaaa gaaagagaaa aaccctcttt tcgaaagcag 120  
 acccaagaac tttgggtattg gtggagatgt acaaccaaag agagatgtct ctcgttttgt 180  
 tcgttatccc agatatgttc gtcttcaaag acaacgaaag gttctcatgt cgagactcaa 240  
 ggtgccacct gcgatccacc agtttacgca taccttggat aaaaacgttt ccaaacagct 300  
 attccgcttg ttaatgaaat atagaccaga gtcgagggtg gaaaagagaa agcgcctacg 360

<210> 3095  
 <211> 382  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-060-Q1-E1-H1  
 <400> 3095

atcggatact ctaacctcga tggtttatca ettcgactcg gtatgctgct ctggatactc 60  
 gttgatgaat attgtaaact atttcctggg aattttgtat tcaaattctg tgctcgctca 120  
 tccttgtttt cttgaacagg tcgagaactt gtaacgggtc cataagaaat ggaatccaac 180  
 ttgctcatga aattgtcttt ccatttctcg ctcgtagaat tttcagtact tgccaaagaa 240  
 gcctttgtct cggaactga atgctccttt cctgatacat tttcaaatga aacctcttcc 300  
 ttcttggaag taatcgggtg ttctaataatgt gtattcaaag atgtattcca tgctgtagaa 360  
 gactgctttn caacaaaaga ca 382

<210> 3096  
 <211> 206  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-060-Q1-E1-H10

<400> 3096

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gagaaaagcc gtactgaaga cgcacacagg tactcgagga gaaagatatt aggtggagtg 120  
tcctaggtga cgtggaagga attgttgttt tgattttgtt tgtgtgtatt caatgtataa 180  
gcaagcaata aatagttttt tcctac 206

<210> 3097

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-060-Q1-E1-H3

<400> 3097

cgcgtcagct caaacgtccg gttgggcctt ctggtggaga tgccctggat tgagctacgt 60  
agtggcaact ccgctgtctt gagagacata actgcaagta ctgaaaaccc tgacataaag 120  
gggagaacga cgacgaatct cagtacctgt ctgaattctg cacaaggaaa tgttacggtt 180  
gacttgtccc tgcagtgtac cttgacggat aaattttcat tgaagcttct cgacaatcac 240  
tttaaattgg cgtgttttac tgataccttg tttttagttt taccatgctt atcctttgtt 300  
attactggta atcgtatagt ctgta 325

<210> 3098

<211> 377

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-060-Q1-E1-H4

<400> 3098

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gggccatctg gagctgggaa aagtagtatc atacaaaagc tgaacaaaga ttacctgat 120  
cgaataggat ttagcgtaag tcacacaaca agaccaccgc gaccgngnga acaaaacgga 180  
gtagaatact attttgtttc cgaggaaaaa tttaaaaaaa tgatagagaa tagtgaattt 240  
atagaatatg cgaatgttca tggaaattat tacggaacac gttttcaagc agtagagagt 300

gttctcaata gangaaggct gtgtgtgctg gacgtagacg ttcaaggatg ccgttccatt 360  
cgtcggagaa acatgaa 377

<210> 3099  
<211> 404  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-060-Q1-E1-H5  
  
<400> 3099

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tgtgatatgg tttagcatat ttgatatcca atattcttgt ttatgttctt tgaatgcctt 120  
gaaccagatg tgtcgaacct acagcgtgct tgtgccggct ggcgatgact ttgaatttcc 180  
aaactctcct tgcttaagtg actgggatct cggttcatttt gtttcccata gcaacgaacc 240  
tgtatttcgt gtatttcaca agtgcacat gtgctgcttt ttagaacana gaatagttgt 300  
ctttcgggat ggcctttgta tactgaaaaa ttccaacagc tggttgttgt tggatgcttt 360  
gcgtgatatc acaaaacatg aaaaggacaa agaaaaccg ttct 404

<210> 3100  
<211> 367  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-060-Q1-E1-H6  
  
<400> 3100

aggagaaagt caaccagatg aaaacagaac gtggctttgc tcttacggat atattgcgtg 60  
aaatacataa aagaatattg acaaggaata tggcagtcg agcgaagaca tatttattgg 120  
agaaatttgc tgaaatagaa catcatcttg cttttggctg ttctgaaaaa ctccagcttt 180  
gttctttgat tgggtgcttt caaatcatga aggcgttgga agtgttgga gctcaagttg 240  
gaagttagta ttccatgtaa gaacattata ctatagggac gaaggattca tctatataaa 300  
tattgcaaaa ggacacaaag caatctcttt gtgctcgaga aacatatata tacatacttc 360  
ctgtgta 367

<210> 3101  
 <211> 352  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-H7  
  
 <400> 3101  
  
 gacactatct gccatggttg gtgagttcat cgcattgttt acatctgcaa gatgtccttg 60  
 ttgtcatttt tggcgtttgt ctgactttcc aacattggac actttgcaag acgtgtgctg 120  
 tcatttacca gcctccttgc gatatagttt acgtcaggta tcataaacag gcataacacc 180  
 tgatattgcg taccaactcc acgtctcccc atgaatctgg tcccagcggt ttagatgcct 240  
 cagtcacaat agtcatagcc atagactcga cggttctatg tacaaggctg gttttccaag 300  
 gaacttgagt catgtgtccc ataattagat ctcgtcacac tcgactcgct tg 352

<210> 3102  
 <211> 140  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-H8  
  
 <400> 3102  
  
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 gaaaaaatc aatggaaatc atataaagaa aaaaaaaga gggtaaaaaa ttcaaagggt 120  
 taaagggttt gatgcagtaa 140

<210> 3103  
 <211> 129  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-060-Q1-E1-H9  
  
 <400> 3103  
  
 ccacgcgttc cggaaatagg acagctcaat agcagattgg ataaggagtt aatgatgagt 60  
 atacagttat gatacttaac ggtagtgtat acgaaatatg gatgtattaa ccgagtatat 120  
 taaggaaat 129

<210> 3104  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-061-Q1-E1-A1  
  
 <400> 3104

aggaaagaat gagtaagaaa aaagggagtc attccaccag gggagtaaag gcgcaagaaa 60  
 gaaacccaaa gcaattgacg ggaatcgga aaaggggtgg atcacgtgga ttaggccgat 120  
 aaaccgagaa ccttacctct ccaagaaggt gttgcacggc tgtcgaaaga acgtgctgtg 180  
 aagtgagaga acgtacgaga aagccaagtg aggaaaagaa ggcaagtaga gggcggccccg 240  
 agaaaggaga gggcgtaaga cgtgatacag agtacgaaga aaagagaaga gagctagaaa 300  
 ggaggtaaaa gaagagtaaa aggactagaa gaggtaccga attcaccacg aangancgtg 360  
 aaggaaggag gaatcccagg taatcgagga agaaaaagct tcggtgaaag cgtgaacgga 420  
 tt 422

<210> 3105  
 <211> 338  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-061-Q1-E1-A10  
  
 <400> 3105

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 ggacaatggt tgcaaagact gctctgagtt gcctctttct ctctttcctt atcgctgccg 120  
 cagttgcagc cgacgtggtt tcacatgaga gatggggata tgctcagcan acccaacaac 180  
 agcaacagt ccaacaagta tgtaaacagt atgcatacta tcagagtcca gtctgcactt 240  
 ccgtaaccac acagagccca tactggaacc aatgctcgaa gactgtgcaa accttttgtc 300  
 ccaagccagt gcagtactta tacccaatct cctacatg 338

<210> 3106  
 <211> 397  
 <212> DNA  
 <213> Cyanidium caldarium



<223> Clone ID: LIB190-061-Q1-E1-A2

<400> 3106

acggtcgttg atctccaaca accgcagcca tcatgaaaat actttttattc gactcgggttc 60  
ttctttctcca gtaactcagt tgcaaataaa gaaaagtgga ataagaccgt cgtgtggaga 120  
acggatggcc tcaacaagt tgtggctttc ctgaactaga caaggcttta ggagggtgga 180  
ttcccataag ctccctgttt atattgttgg aagacgaacc taccactatc taccagtaag 240  
tattgccctt ctgtgcaat gtattccaat aaaatatatc aagatctagt ttagatgtaa 300  
aatgaaaaa gaacagtaag aagagaaata caggtcacga attcatgacg aaagcacctt 360  
gaaggaagga agaatcccaa cttgcccagg aataaaa 397

<210> 3107

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-A3

<400> 3107

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atagagtttc ggcgaagaga gttaaagaac gtttgaaga agagtgcaga aatttgggag 120  
acgggggttc aagagacgag aatctcctta aagacctgga ggaggagaaa aagtcactgt 180  
tgccgtacat tcagagactc gaggaagact tgcgggtgcct aggagaggga gctttttctt 240  
tgttgagaga tgaagcacat tagaaacacg tagaggtggg agagttggaa ttgttcgggt 300  
tccatgtaat ccgtaagagc gttctggaaa aggtgtcttc tgaagaatag atacctacga 360  
aacctgtata ggtcgtccac aacggaactt cgggttcaaa agaataaata gtatttttat 420  
tgtaaaaa 428

<210> 3108

<211> 421

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-A5

<400> 3108

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 aacaacagta tgttcagaag aagaatatgt agatatattg aacaaagtta tcgtcgatag 120  
 cgactgggggt gaccttccaa aattgagaag gaaactagct tcgttgaggg aaagggaaca 180  
 accaacaacc acgccaaggg agacaagagg acaaacaggt gactggctca ctcaaagcgt 240  
 gccatcgaca tggagtactc cacaaagtgt gaatagtaac tatagaacag tggatgacaa 300  
 aacggaaaaa gtatctaaag ggaacaaccg gcctttggaa aatttttttc ggaaatatta 360  
 caccgaaaaa caactattcc tttgagggtg tggttaagaca ggaagaaaaa gataagagaa 420  
 g 421

<210> 3109  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-061-Q1-E1-A7  
 <400> 3109

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 ctgctctgag ttgcctcttt ctctctttcc ttatcgctgc cgcagttgca gccgaggtag 120  
 ttgtcagagg agagatgggg atatgctcag caaacccaac aacagcaaca gtgccaacaa 180  
 gtatgtaaac agtatgcata ctatcagagt ccagtctgca cttccgtaac cacacagagc 240  
 ccatactgga cccaatgctc gaagactgtg caaacctttg tcccaagcca gtgcagtact 300  
 tataaccaat ctctacatg gacctattgc agcacctaca ccaccactag cgtaccatct 360  
 caatgcagca aaggcgggta ctacttatac tcaaactgac tgtgcttatg cccaac 416

<210> 3110  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-061-Q1-E1-A9  
 <400> 3110

cggctcgacc cacacgtacg aaatgactct gtatgggtcta cttctacagc ttctcaagct 60  
 ctgagtgtctc ttccaaccag tgcaccaact ggagcctcat ctagtagcag tagtagtgca 120

gtatgggtcc ggagacgtgt cattcttggg gcaacattca atcagtcgat atccctttca 180  
 tcgctttcca ctggatccca taattttaca tcattagtat gattgaattt gaccatcacc 240  
 aagaattcgt caggtacatt tgtaggctct ttcgagtg taaaacctga tgtcgctgtt 300  
 ggctcctcct ttatcgatgt gattgatgga gttcttggtc caccaccacc aacttcgcgc 360  
 acaagtgtc caactgctgt aacttctgt cccatcacta cagtt 405

<210> 3111  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-B1

<400> 3111

tccaggcgtc aggcttgagg tgtggcttgg ttttagctg cgtggttaact tgtgtagctc 60  
 tttaggtaac aataatgcag atattcgtaa agactcttac tgggaagacc attacgcttg 120  
 aggtggagcc ctcagatact attgagaatg tcaagtcgaa gatacaagac aaggaaggta 180  
 ttccccaga ccagcaacgt ttgatttttg caggtaaaca gttggaagat ggtcgcactc 240  
 tctcagacta caacattcaa aaggagtcta ctctccactt ggtcttacgt ctgaggggtg 300  
 gaatgcaaat attcgtgaag actcttactg ggaagaccat tactcttgaa gtggagccct 360  
 cagacactaa tgaaaatgtc aagtccaaga tacaggacaa ggaaggtatt cccccagacc 420  
 aaca 424

<210> 3112  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-B2

<400> 3112

ggagggcacc gatttgtgtc tccacactta cctgtttatt gttgctttat tttgatcctt 60  
 tctactgaaga agacttcact ttacgtcaat gtctttctgt ttttttcctt gggttcgcag 120  
 tttcttttct cgacaacgtt ttggttatag agaagtgttt cttagtggtc atcaacacta 180  
 ttttggtatgc acctccttcc aagtcgctta gtgaggcttc tgtcgttcaa gttgcagagt 240

atcttctcta cttgacaaac gcttctatct cctatcatag aaataaagag tccagcgatg 300  
 tttatgaaca ggtgggtcat gttcatgaga gaatttggtg ccgtcttcct catgctatta 360  
 tagacgatcc ggatggaaaa aagtcgag agttttaaag attctgaact tcc 413

<210> 3113  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-B3

<400> 3113

caggcgtaag cgtttattag aagacttgcc tcttccaaaa ctggcactta atggcgctgg 60  
 cgggtccaaca gcaactgaac ttgcacgttt gcttggaag ggtggcacta tgggtggctta 120  
 ggcaaatgag tccgggaaac catttagtat tctactact ctatttaca cacaagatat 180  
 ttactgaaa ggattctcga tgcttaattg gttaaagtcc aagtcagagc aagatgtgaa 240  
 gaaaatgttg caaagtgtca cacaatgat ggaaaatgac cagttgaagt tttggatcga 300  
 aaggaaaaag ttggaacaac tcgaacaac attagaagcg ttaaccacaa aagaaacctt 360  
 cacaggaaaag atcactatct ttagttacca aaaagggaga gatgtacttg agtggctcgtt 420  
 gaa 423

<210> 3114  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-C1

<400> 3114

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 agcgtcccc agaggagttt actgttgac catcgtagc gattcccaag gctttgagac 120  
 atggcgccaa tatcgatata gaagatgtgg atttgctcga gatcaacgag gctttttctg 180  
 tggttgcttt ggcaaatatg aagatattgg gtttgatcc atccaaagt aatgtgtttg 240  
 gaggtgcagt agcattaggt catccacttg gctgcagtgg tgctcgaata gttgtaactt 300  
 tattaaatgc actaaaacat cgccaaggaa agatcggagt ttccgccatt tgtaaccgaa 360

ggcggtggtc cgtctgcttt ggtttttcaa acggaataaa tttttttatt ttgct 416

<210> 3115  
<211> 330  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-C10

<400> 3115

aatcccgctc cgacccacgc gtacgcccac gcgtccgccc acgcgtccgc ccacgcgtcc 60  
gcaataaagg cataaactcc attttttcta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa agaaaaaggg aaaaaaaaaa aaaaaaaaaa agaaaaagaa taaaataaaa 180  
aaagaaaata aaaataaata aaaatatatg gggtggtcga gtctataggt ttaaatttta 240  
gttagtcttc tatactagtt tatgggtgta caaattgtta ccttgattta aattaactgg 300  
ccgtcgtttt aaaacttttg aaatggaaaa 330

<210> 3116  
<211> 422  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-061-Q1-E1-C2

<400> 3116

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actccttcta ctctagagaa aagacgaaat agtgactcgt tattaccttc acaggcggaa 120  
agtttaaaag atggtttcaa acaagtggaa gaacaacaca gacgagattt aaaaaagctc 180  
gaaagggcgt ataaaagcgc tgtgaaacag ctgcaactga agcacagggt atgcaaagtg 240  
ttgaaagcaa agaatacagg tgggtgtaagt aaggaagagg agaagtgacc cataaagtca 300  
tgaggagat tgtgggagtg ggaatgttgc ctcttcgtcc tttctttctg aggttcagan 360  
gaatgtgatg ggagaagtta acatcattat agagaatatt tgtatatagg aactacgata 420  
ca 422

<210> 3117

<211> 362  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-061-Q1-E1-C3  
  
 <400> 3117  
  
 gaattcccta ctcgacccag gcgtacgggc aaataaggga aagcagtaaa agaagaaaga 60  
 gaaaggaaaa aactgagtat caggaagaaa agacggagta gatgaggaaa gaaagatcaa 120  
 ggaagtaaga gtaggagagg gagtaatgtg aatgaaagca ggaaagtatt tgaagaagag 180  
 agtgtaaagc gcgtaccttt tgcataatgt cccagcgagt gaaagaggaa gcacaaagaa 240  
 agaaaaagaa gtagccaggt aagacccgaa gctagttgat cctatgctgt ccaagcgaag 300  
 taaggctgaa ccagtatctg tggaaaaaga tttggaagag atggcataaa gggttaaaag 360  
 cc 362

<210> 3118  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-061-Q1-E1-D1  
  
 <400> 3118  
  
 ctgttctgat ggtttaatat ctgtagacct tgccaaggac cttttgactg cacataagaa 60  
 ctcggttgct gttattgtct caacagagaa tataacgcag aactgggtata gtggacatga 120  
 gcgttctatg ttggttacca atacgttggt tcgtatgggt ggtgctgcaa tattactaag 180  
 taatcgttcg aaggatagaa aacttggaag gtatcgttta aatcatagcg ttcgaactca 240  
 tttcggagcc gatgacaatg cttaccgtag catatatcaa gaagaagata gtgaaggagt 300  
 gaaagggtgtt cgactgtcca agtccattat gtatattgct ggtcaagctc tgaaacacaa 360  
 cataactact ttgggacctc ttgttttgcc tttttccgaa catattcga 409

<210> 3119  
 <211> 331  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-061-Q1-E1-D10

<400> 3119

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tataggatgg tagtttatcg aaagggacta gtaaataatgt tacaaaagtc tttaggagag 120  
tttaaagatg ctgttcgtca ggagaaaatc aaagaggact tttccaaaag cgaatatcac 180  
gttacaaagg gagagaagat tcgtgccaat agacttcaag cacaatatgc aagaaaggca 240  
acgaagactt ggaatatgat caatacgtg ttggaaagac agtcgagagg attctaattg 300  
gatatttgta tgtggaggag ctttaaggaaa a 331

<210> 3120

<211> 366

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-D2

<400> 3120

aattccaagg tcgatttgac ataccaaga gagagagagt agcagcatga gtgaggaaga 60  
agaaccttgt gacaatgaga atatattagc ttcattgtat caacagttga aaactttaca 120  
attcccagct gtacttgggg cactagagac aacaccacgt ggaaaacacg ttgcacaagc 180  
cactatacca gagtcgtcgt cgtcagtgac caccaagaa aatatgacgc ccaagttgca 240  
agcaatagct attgcactga aaaaccaact tgtgcgact acagaacaaa tggaatattg 300  
gaaacaaatg tatgaaactt gtgaagaaca acgtagagaa tggaaagcac aatgggaaga 360  
aaaact 366

<210> 3121

<211> 421

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-E1

<400> 3121

agggatcatg taaattaatc cgatttaaac cgagaacctt acctctccaa gaaggtgttg 60  
cacggctgtc gaaagaacgt gctgtgaagt gagagaacgt acgagaaagc caggtgagga 120  
agagaaggca agtagagggc ggcccagagaa aggagagggc gtaagacgtg atacagagta 180

ggaagaaaag agaagagagc tagaaaaggag gtaaaagaag agtaaaagga ctagaagagg 240  
 tacggaattc acgaggaagg agcgtgaagg aaggaggaat cccaagtaat cgaggaagaa 300  
 aaagcttcgg tgaaagcgtg aacggatttt gtacacactg ccccgtaag tcctggaagt 360  
 gtgctaagaa taagcagcag cggtaaaacg tgtgtagcaa gcgtagagca gaagaactgg 420  
 g 421

<210> 3122  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-E2

<400> 3122

agcgacgca tccggatttg tatgaaaaca gttgtgtagt gtactaaaac taagtatttc 60  
 ctgtacttat tcttaacttt ccaaagcaca gtggatcttt ggtagcaatc aaggtaata 120  
 gtctgctaaa tttcaaagtt gctttcctga agcggcatat cactctatac cagtatttcg 180  
 atggttattg gatcgtcttt tgccggttaa cttgaatttc tgtggagttg cttgttgctt 240  
 gaatgataat ccaacattgc ctccaagcga atgaaatcct ttgtgtatcg tccgggaaca 300  
 ttccgcattg cgtgtgcttt aacgaacctc gattcagcaa atacttctcg gtccgttcaa 360  
 ggacatgaca tctgtcacgt attaatcaca taatgtcata tacttgcct gtttactca 419

<210> 3123  
 <211> 308  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-E3

<400> 3123

gaattcccta ctgcacccgc tcgtcagccc acgcaaccgc gcatgtttta gtgttgatc 60  
 ggaagctgtt ttcgatactg taaacaactc tctttcgaag tggaatggcg cgctgaatta 120  
 tgtggatgga agacgcaggg aaatcggact aagtgttttg gaaaagggcc agatgggaaa 180  
 gtgcacgtac tcccatcaag tttctcccaa ctttgcagtt gctgctgacc ttcgtttgag 240  
 tcgatctgga tattagcgtc taggcggcat gggtaccaa ctacctgatt gatgagtcca 300



taatcctc

308

<210> 3124  
<211> 321  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-061-Q1-E1-F1  
  
<400> 3124

agcggacaca tgggctgacg cgtgggtgaa ttcctacgag tgtgtacaga gaagaagcag 60  
tacttccttg ttctatgaca actgtctctt ggcattgctgc acattgaaat acggcgaagc 120  
gggtttatgt cttgaagtac caactaatac attggaattt ttgcaagttg ttcattctga 180  
atccactatg acgcaaccca ctaggaaaga tagacgatga atcttctaaa taaattaaaa 240  
gcaacttttt gttttcaaaa cataaaagaa tagcataacc caactaataa aagaatgaaa 300  
aaacttacgt aaaaacgtga a 321

<210> 3125  
<211> 422  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-061-Q1-E1-F2  
  
<400> 3125

aggtcattta ctcaacgttg aacaaaaaat agaaatatat tctcagatga cgttggaatc 60  
atggcttgga aagtgagaac agtctctgaa taccacctgt gcagcctgaa agtggatgtg 120  
ggtagaacac catgaatgag aaggcaggtt ccggaaggaa tgttgactta agctagttgt 180  
gagtgaata ggaaagctac aggagtatcg gcagcagtat tttcatgcca ttttctctaaa 240  
ggtttctctg caatacttct aaaacagcaa attgagcgcg tacgatcttc tgcattgaatg 300  
gcaatgcgac tcgggtggaa aggattggaa tgaagcccat aagagtgagc gcaagaaaca 360  
ttatttcaat tttttcgagt catgcacaaa aatgatccat ttgtatttct ccctgaaaaat 420  
ta 422

<210> 3126  
<211> 421  
<212> DNA

<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-061-Q1-E1-G2  
 <400> 3126

aggctcgagaa ttgcctcgtc gaatgagagc tctttgcgtg gttggtttct tatcgtcggc 60  
 agagtctggt tatctgcact ataataaate gcgtgtgccc tttaaaagcc agtggttcacg 120  
 agattttctct aaatactgta ttaagggcag aaaagggcct tcaaacgaga agaaaattaa 180  
 gtattagcct tttcttgga cttggcttga aacaaaacac gtgttcagca ctccatctgg 240  
 tacagggtgac aaatgccacc ttcagtgacc tggatatcag cagtgtagcg ggaaacgagg 300  
 aaccgcata tagacaaact tttgaaaatt taaggattgg tcaagtattt gaagggaaca 360  
 gtggaaaagt tgatgccata cggggctttt gtgaatatag gaccgaatct ttccggactg 420  
 c 421

<210> 3127  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-061-Q1-E1-H10  
 <400> 3127

cgacccaaac gaccggtgag aagaagagta ggatcggcaa agaattgtacg aaagaaggaa 60  
 aagatcatgt aagagaatga aaagagcaag agtaggaagt gtaacgttgt acaaaggaga 120  
 aaggaactca ataggatcaa taatgaacag gataggagta atactagtga taataataat 180  
 gttaatagga gaaatatgta gaagagaaga aatacagtta acagtaagag aagagataaa 240  
 gataataatg ctgttgggaa taataaacca tatagcaatg tggatagtaa agaaatgttg 300  
 ggagtatatg aagtaatagg aggaatagca gtaataagtg gaataggagt aataatgagt 360  
 aagaaagggg tagaatcagt agtgtatatg a 391

<210> 3128  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-061-Q1-E1-H2

<400> 3128

actcagacaa ccaatggatt ttctcttgga cgagatgaac atcttgccaa gtaacccttg 60  
acttacaac ccaacctgtt ttgctattgg gagaaacttt tcgacactgc gtaggaccgg 120  
ggattccttt gtagcgtgtc ttccactcgg caagctagtg ccttgaatat ttcgacaagg 180  
cgctgtgcaa tattctgggt ttcacacgt ggcgtgtagt caagaaatac aagaactgct 240  
tcagtacgac caaatataga aaagggtata cctagagctg agtaaatacc aaaagtttgt 300  
gccagtgggtg ctcgaggaggaa aataggattc gagggagat ggttcaacca aagaggcgtg 360  
ttgttcacgt agactgttcc tggtaaaccg tgactgggat cgaattcata tttctgacta 420  
ga 422

<210> 3129

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-061-Q1-E1-H3

<400> 3129

agcccacgcg accgggggtgc gcagagaaag gatggctgcg gacgaagacg agtttgttct 60  
caagtgttta gaaatacgtc ccgacgccag ttgttctttt cgactagga ataggggaac 120  
gggtatttcc gaagccaacc aaagtacttt atggcctggt ttgtcgagaa agaatcgtat 180  
gcacaggaaa ttaaacttta cagacctgaa agtgggtgac cctgctttca aaaggggacc 240  
aactcttaga atcttaagaa atgttattat tttgtcgggt tttgatttaa gggcgcttgt 300  
atttcatgaa aaggtacaaa tatttgacct ggaaaacctt caatgttccc aagtttcaga 360  
gcagcttaca acaagtctgc agtcagctcc aaagtctggc agcaatttta tttttgaa 418

<210> 3130

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-A3

<400> 3130

cacgcgtcca gacttagtgg cattcaacga acgatgaagt tccagtacgt gagtctttta 60

ttggctctct tatgcgtagg ttctgctctg gctgctgaat tggcacctgg aattgcggaa 120  
aaaccggtag agagaggata tgaggaaccc tgctgtaccg aatattgtta ttgggaagaa 180  
atatgtatca caccacacc cacacctaca ccaacctact attactatta ttacgcaaga 240  
aatgcataac aggaaaatgt cgatagaagc gtagaaaaga gtatctcttc cgcagaaaaa 300  
tctgatgcgg ttcgagggtta tttccccacg tactactatt atgagactcc tacatattat 360  
tactattatg agactccatc cccaaccccg acaccaacgc ct 402

<210> 3131  
<211> 399  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-062-Q1-E1-A6  
<400> 3131

acggacgcgt gggctgcata tctctgatgg ataatatata tatatagtcg atggaaatgt 60  
gatattggaa gataggaatc catccaccaa gcatcatctt attgcatcgt gtgagaattg 120  
gaatgatgca ataagagaac agtctgttta tcgagttggg aaacgaatga aacaaatagc 180  
agcagaaaat gaaatatttc aaatggaaac ggaagcaacc gttggattat ttcatgcgat 240  
ggagttgcat cttgtggaca ttatccaagc aactcgacaa caacaacaac taggaggagg 300  
aacaagaagt agcaatatat atcgaccatg gaccaataga ttgactattc gtgacctttt 360  
tcgtttgacg gaatatgctc aagatatatt gggagataa 399

<210> 3132  
<211> 361  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-062-Q1-E1-B1  
<400> 3132

cgggccggcc cacgcgtcca gagatatcgc tgtattggtg gtgtgtgtgt gccaaaggaa 60  
gacgggatga ttgatccaaa ttagcactag gtggcaatag gcgtcggtgg ctgtgcattc 120  
tatgatataa tagctgccta tgtgacattt gaaggatact ggccaccaga ggaatgaagg 180  
cgcatgaaac aatttgccgc aaatgcgggg aagcagcaac gaggagttaa aactccgtgt 240

gtttgtccat aacgaaaacc atcttgctggg tttttgttc atcaacgctg tcaaaaagaa 300  
 ccttctgtga agtgagagaa ctttagagga ttccaactta ggtaaacatg gcaactacat 360  
 g 361

<210> 3133  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-B10  
 <400> 3133

cggacgcgtg gggttgggat gtctcgcat tcagtgatcc aagtggcaca agagaacgcg 60  
 ggtgacttgt tagaaagtcc tttttggaat actttaacca attcactgtt ttatgtagat 120  
 atcgatggaa agagaatcca tcagtatgaa ttggaaacag agactcactc cagttggaaa 180  
 acgagtcaaa gagttggttt catctgtcct gtttctaca gtcctcaagt ggaaacagtt 240  
 ttgggtggta tggaagatgg tctttattgg atcaagttgt ctagcaataa taatagtagt 300  
 aacaatactt gtgtcgaaca acaaatatgg agccacggga tggacaccaa tatagttcgt 360  
 ttcaacgatg gaaagtgcga ttcgagtgga cgactttttg ccggactaat ggattatcag 420  
 tggg 424

<210> 3134  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-B11  
 <400> 3134

cccacgcgtc cgaaaacaag ttgcctgagt gaaaagtgag aaacttgtgt gtatccgtga 60  
 catcaacatt gttcaacgtg acagacagat gaaacaaaag tacattatgt agctagttac 120  
 ctatgtgcaa tcagcttatg atagcaactt tcttagagct ttgcacgttt gttaacgaaa 180  
 caagcaagta gctcaacgtt gaacatatca attttcaaag ataaattggg aaacaaacgt 240  
 gcactaaaaa accacacatg gtttttactc taaagttaca agtaacattc actcctgtct 300  
 ttcaggctgg tgtgtcggaa gctgaggagc tgcaggagct gccatgggtg gtggataaac 360

tacagcactc ccagtgtagt atgcaggagt aaaagtttcg tattgagtga acaaaggatt 420  
gaaaccccc 430

<210> 3135  
<211> 381  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-062-Q1-E1-B12  
  
<400> 3135

aatcagggttc gacgaagcag agcaaggatc gcaaaactat caaagagctg aaagccgagg 60  
ccttggagac taaaaaaagc ggcttgaata cacgctccga aaccgtggcg cacgacgaag 120  
taacaactct ctctctgca atatctcaag tgagaattga cggagccaaa agtagtgga 180  
agtgtgctgc agagaaagaa aactgcaaca acgtcattcc tggcgacaac aaacagacaa 240  
ggtcacaagc aatcggaacc cgcaatcttc gaagtagaac aattccaag cccaattaaa 300  
gtagttgttt tatatttcgc tgatatgcct ttgtttctca aaacatattg aaagcttttg 360  
aatgtgttaa agagactgat t 381

<210> 3136  
<211> 367  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-062-Q1-E1-B2  
  
<400> 3136

cggacattta gtgtgtttgt tgcgattgaa agagagagag caaaaagtat tggagtgttg 60  
taaaatgtca agttttctaa ctcgagcagc cttgtcattg cgtggtgcga tacaacaac 120  
acaaaaccag tggaccaaca atggagtagc aaggagactt tatcacgaaa aagtagtcga 180  
ccattatgaa aacccaagga atgtaggttc tctagataaa aacgacaaat atgtgggcaa 240  
cgattttctt ggttggaaga agatatgttg tctgcaacga nggtgttata caaagctgct 300  
acagaaagag tagtgactat ggtgggatta aaacaggaac caaatgccaa agagattcta 360  
gaaaagt 367

<210> 3137  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-062-Q1-E1-B3  
  
 <400> 3137  
  
 aggttcggtg gaaatgagca acgaaagacc tgtttatgac gatatggcat ttcttactta 60  
 tggcgtagga attagacgcc aaagtatctt ttatggcaac tcacttacca gacaagtttg 120  
 tacggataaa aagcaagttt ttcaaaacgt tcttggaat ataagggcaa gcaccacaga 180  
 agttccgaag aaactctcaa aggttgaaaa ttacaagaaa aactcgagtc acttgaagtt 240  
 tcccctgcag caggatttgg aggatgataa catttttgtg tcggaagagt cggttcaaat 300  
 aatcaaattt cacggttcct atcaacaaga caatagagag caaaggaaga aaggggaaca 360  
 gaaaaagtac caatttatgt tgcctccaaa gt 392

<210> 3138  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-062-Q1-E1-C12  
  
 <400> 3138  
  
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 aagatattat ggtcaattat gatcatcagg ttcgagattc tggaggtcat gctgtacagt 120  
 ttctttacgg agaagatgga atggatgggtg ctattataga gcgccaaatt attcattcta 180  
 tgcgaatgag tgatagagaa ctggagattg cctatcgatt ggatcccttc gatgcaaagt 240  
 ttggatttgc accaaatggg aggcgatatt tagatataga tgttttggag gccgttcata 300  
 atgattctga gcttgccgtc ctgttaaate aggaatttga agctatcaaa gaagatagag 360  
 atttattgag acattccata tttcctagaa cagacgataa tcgtgtagca ttaccgggtga 420  
 atattg 426

<210> 3139  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-C3

<400> 3139

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aatcatatga aagaaggaat ggagaatata aggaaggatt acatgaagga ggagataata 120  
ggagaaatga taaggtggat atatatatcg ataataagtg tgatagtaat ataaaggagg 180  
agaaagagag gaaagagggt tatgatgcag gcaaagaagt gacgcagtag atcagagagt 240  
aacacatgca agtaggtaaa gcgaacgggt gagtaaagag gtgtgaaaga gtggaagaac 300  
atgaaagcac agaagaatgt aagaaatggt tagagtaaac agaaaaggaa gtaaaaggag 360  
ggaatgaagg gaagttatgg caaaaacacg tgccagcagc 400

<210> 3140

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-062-Q1-E1-C6

<400> 3140

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gtggaggctt tgttgtgggg aaatatgtgt ctctatttct tcaatatatt cttggtgttc 120  
tttatctatt gggttggtga aactggtggt tggattccta ctggtgcaga ctatcgcgta 180  
ttgacttcat tggaaaagga ccaactggga aaggaagctc agttgcatca ggatagtgcc 240  
taagaagaag caatgttgggt tggttgttga tgtgttggtg gtggattgtg tacatatata 300  
gagagagtgt gtgtgagaga aaatgctttg tgagtgaacca ctctcaaaa ggcagtgtga 360  
acaaatcctc acanagcana agaggaaaat aaaagctct 399

<210> 3141

<211> 235

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-C7

<400> 3141



agacagaaga aagtgtgacg agtttggaga tatctgacta tgagtgggaa gtattgagta 60  
 gtttttagacc tagtaaggca ttgcgagaaa gacttttgca aaatatttct caaaggcggt 120  
 ggagagacga agcgttacgc cttgttcacg actccaaaca cttgacgatg ttatggagta 180  
 acgtagtttg acgcaagtgt ttatttaatc ataaagtctt ttcgaccttt catac 235

<210> 3142  
 <211> 346  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-C9  
 <400> 3142

accacgcgt ccgcccacgc gtccggcgat ttgtagttat gtttctgcg tattagaaga 60  
 aggagatcgc gtattgaatg ctattcgaaa gcatacagtt cctagtggta tgtttacaga 120  
 ggagattgat cgatatactg gtttcgagca aggagctatc aatttaactt ggagttatga 180  
 tgcctttgtt actgcggttt ggtcgaggga agatgttcac aagttgtttt ctaaattattg 240  
 tgaacctcct tctccatcgc tacctagtat gccaggacct ggtggtttat cttctccata 300  
 ataagaggca cttgtgcact ttggatattt ttgtggttca cattaa 346

<210> 3143  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-D1  
 <400> 3143

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 tactactgag ttgacagcaa ctctatttta tgtcttttta ctccaactct tttctttcgt 120  
 cgctagacac gggtgaagag tctagttggg gactgaagat agtaagtata tttcagaatc 180  
 cgagctccta gtgtctaata ttatathtag gcaaggtctg cttcctcggg tcctttttcg 240  
 atcgaggaag tgtctggtac tggtaaata ctcgtcggga agcagaagac gggggaatat 300  
 ttaagccaaa gtctgaatcc ggaaagattt agaggagact caacaagaac aactcgatgc 360  
 tcaaattacg actttgtttg ggaagaagcc ttgggttagg gcgccttcct t 411

<210> 3144  
 <211> 425  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-D10

<400> 3144

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 tgaaatcagc gaatctaaaa cttcaaactg tacttagttt tcatcgttgt ggtggaaatg 120  
 tgggtgatca gtgttatatt ccattgccaa agtggatatt tgcagttgca gaaaacaact 180  
 ctgatatctt tttcaaggat agagatggca atgccgatga cgaatatctt agttggggta 240  
 tcgatgaaga acccgtcttg atgggaagga cagctgtcca agtataccgc gatttctttg 300  
 tttcttttcg ggaaactttt cgacaatatt ttggaaatgt tattagtcaa gtacagatag 360  
 gtctaagtcc agctggggaa atgccttatt ctagttatca gttggccaaa tggacatttt 420  
 gtgga 425

<210> 3145  
 <211> 179  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-D2

<400> 3145

accacgcgt ccgctttcaa atattctttt gcaaaaaaac gaattgccac aattagtcgc 60  
 aaaccaatat cctatggcgg ttataaaaa agagcgcaag gttcggactt gttctccaag 120  
 taggggaaaa ttctgtgttg ttttagagac atctattata aaactgtcta taccgaccc 179

<210> 3146  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-D6

<400> 3146

agggcgtaga taagcacggt ttgaataact gggaagctat tgcagaagat cctgaactgg 60

gatttccggc aactctagaa aaacttgctc agaagaaaca aaatgaatct ggctctgtca 120  
 acgagaaaga tttcaagttc cccaaagcaa aggtctgtca aaaacgattc aacttggttac 180  
 tagacctggt tgtatcaagc ctggaatctt ttgaggatta taatgcagtg caacaatcct 240  
 cttcctcggt ggtgattgac gcgttacagt ttaatcgaga tatactgaag gaacaacctc 300  
 tggatcatggt tggagatcct cgtggagttg tagaaatacc agagaactca gaaactggag 360  
 agttacgtct tccgtttgat gtgggatgtg gactagttat tctcagtttg ggtc 414

<210> 3147  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-D8

<400> 3147

agggcattggc gaaaggtaga ctacaggatc gtcttgagaa gcttctgcct tataatcaga 60  
 cctgggtattt ttatataacc aagatagtat tttacgtatg cacttttatt ttctctgtcg 120  
 tcattgctgc tctggtcagt aacgcaaagt ttaatatata tgataaatcc ccaccgaata 180  
 ttcatggaga cttttgtgca tacaaggcgt cactagctga gccagctggc gtgactgcc 240  
 ttgcaagta cctcatagca gtaggtgctc ttggccttgt gtttgctata gggttcggtg 300  
 cattctctct atggaccctt ttggcacatc gactgattga tttatgggtg gtcgaagcct 360  
 tgttgaatac cttttggatg gtctgggtgg ttatagcagc tggagttgct a 411

<210> 3148  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-D9

<400> 3148

cggacgcgtg ggccggacgcg tgggcgtaga gtcaagtgtg gatattccca ggtctctagt 60  
 tactccttcc tttgaaatgt tgaaaagact ctgtttccgc tggttagaac caagccatcg 120  
 cttctatcga tttataggaa ctgtctatct acaggatgct gctatcatcc ctatacctga 180  
 gctagaaaga gacgaagagt ttagacaatt caagaaccag attttgtttt ctaaggacag 240

agatgaaaag acaaaagaaa gactcagaat aagacaggaa gtacttcaag agttagaaga 300  
acaagggatg attcgaagga agaaaccaa gaactcttca tatgacccca aaaatggaat 360  
ttatatggag agatacttga caacagtacg tgaagttgct gaggagtatc tgtttgaat 420  
agacaacaga 430

<210> 3149  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-062-Q1-E1-E10  
<400> 3149

atagcgcgat aactttgaat ataagcttcc aaataactcg ggaagaatgc catcactcgg 60  
acaactgtag atatacgacc cgtaaataga aagttatcgg taaatagacg caaagtaact 120  
gaattagcgt tttgtacggt tggtaactga tcggtgggta taaaacgaga gaaaataggt 180  
cttcgtaaac gttgatattc ctttaccata gaatagactg gggaatggac aggtaacgta 240  
gtttctgctc tctctaataa gcgtgaaaaa gcttcacgaa catccgaaaa gggaacttcg 300  
gaagcaaadc tagtaatggt agctatatga gctacaaata gttgtccttg atcagaacct 360  
tgtaacgagt tttccaattg ccaaagtatt ctgtccagtg cttgtttcct tgcagcttca 420  
tcctaagtca 430

<210> 3150  
<211> 432  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-062-Q1-E1-E11  
<400> 3150

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aatcctttca aatattgagc ttggaccatc gaaatcctcg gtatattttt gaataaaaaa 120  
cgagaactaa tatggaaaaa tatcgaagag ttgagcgagc caaaagtccg ggccagactc 180  
cgccgaatca agtacgaata actgcggcgg gcaaagtgcc agcctatgtg gactatgcag 240  
tcaagttgct tcaagaggat aatggcaccg tggaaatcgt cgggctgggt aatgccatca 300

ataaggctat cactgtagca gaaatattga agcgaaaagt cnccaagttg gagcaagtaa 360  
 caaatcttag ttcggtgact attgaagacc gctgggaacc attggaagaa ggcttggacc 420  
 ctattgaaac ga 432

<210> 3151  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-E2  
 <400> 3151

cccacgcgtc cgagagcggc gaacgacgtc gattgtgagg tggcttgatc ggttccttcc 60  
 ctaatattcg acaacgagca tggaagaaac tgctgggtgct agtgcagctt ccgcaagtgg 120  
 tgcgcctaag agaagaactt ttcgcaagtt ttcgtaccgc ggagtagagt tggatcaact 180  
 attggacttg aacatggaac aactaaagga gttgttcaac tgtagaatcc gaagaaagtt 240  
 gaatcgcgga atgggtatca aatacaaaac actgttgaaa aagttgcgaa aggcaaaaaa 300  
 ggaagccccg gaacacgaga aacctgaagc tgtgaagacc cacctccgag atatgattgt 360  
 tctgccagaa atgattggaa gtgtcgtcgg agtttacaac gggaaaact 409

<210> 3152  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-E3  
 <400> 3152

agggattttc tgatgaaaag gaacgcattt ggatgtttca taccacggaa cctgaaattc 60  
 gtcataaacc ttacgacgaa gaaattcctt gtgttagtag agaatacaag gaaatatcca 120  
 attcatttca tccttccgaa gacgattgga tatttgccaa tgatgcacta ctttatgggtg 180  
 atttaggaga agaatggcca tcgaatagtc catgggttga atggaatcgt ccaccacaac 240  
 aacaacttga ttcggtatat ccaagaaaag atagtcacaa ggaggatatt ggagaagaag 300  
 ttttttcggt ggatagttta tggaatcatt ttcattgataa tgaatggcaa ctagacttgt 360  
 tatctttctt ggagagtaat aatagtaatg attggtttat taagacac 408

<210> 3153  
 <211> 335  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-E5

<400> 3153

tgtcattata gacaattcgc cttctgcata tggtctacat gaggagaatg cgattcctat 60  
 tggaacatgg tgggatgac cattagatga agaactctta aatttgcttc ctttcttaca 120  
 ggccttatgt gtcttggtg atgttcgctc tattcttagt cttcgtgaaa caaaaggagt 180  
 tttattgcac aatttagtat ctagtggacc ctatcattca tcatgaggaa aattctatgt 240  
 tagatggcaa ttgaataatt gtttgcttga tcgttgctc tgcttctatc tagtagtctt 300  
 tataataaac catcttacat acagttgagt cccat 335

<210> 3154  
 <211> 312  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-E6

<400> 3154

aggaaaaagc ccagaagcca agataaggta tcaaagtaaa gaaagaagga aaaggagaag 60  
 aagagagggt aggcttagaa gcagcaaacc agagaggaaa gcgttaaagc atgaaagaaa 120  
 agaaatccga aaaagaagag aaaaaggtaa gaaagaggac cgaatcaggg taagaggtag 180  
 aggagcaaga agagaagaga gaatgctggg tggagtagcg aaacaagaga agggaagtaa 240  
 aaghtaagaa agaggaaagg tttagcagag aaggaagtag aaagaagaga gtgtaaggcg 300  
 gcgtcataat ag 312

<210> 3155  
 <211> 412  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-E8

<400> 3155

aggggatctc tctttttttt gtggggagag gtgattggcg actctgtcga ggaagcaagg 60  
 cttgggaata gaactatata ttcacatcat tttccatcat ctttctagaa attattgaag 120  
 aagaatagtt gtgagaatat gagtcattat tgtgggtgtgg tggatatttg tttccaatcg 180  
 tgtccttgtc ctgctagtct atggagagtt ggaacaagaa gaaaaagatt gcgttgcggtt 240  
 tttttatgtg taaataatag gaacaattat gcgagtgccg cttcttcac ctcacacatt 300  
 aggagagagt gtctcatcat aggactaggt aatccaggaa ccgagttgag caatactcgt 360  
 cacaacttgg gctttcaagt attggattat tatgcaaata gatattcttt ca 412

<210> 3156  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-F11  
 <400> 3156

aggaaccacc gcgtcattcc ttgttgtgta tccttggatg gtttccacct catatcgact 60  
 agttcgtact acaacagttt ctttcaagcg tggattatcg caagcagtga aaagcgatca 120  
 agctacttct gcttcagaag cgctcaagt ttctagtggg ggttctctct tacatcccca 180  
 ggaaataccc aaagatgctg tcaagttttc attgaaacct tttgctactc acctcatcga 240  
 agctccagaa cccgttgctt atgctacgaa agaacagtta ctggcatatc atcgcacgat 300  
 gacagttatg aggaggtctg agatcagtgc tgatttaatg tataaagcac agttgggttcg 360  
 aggtttttgt catttgtagc atggccaaga agcaacagct gtaggcattg aatcagcgat 420  
 ta 422

<210> 3157  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-F12  
 <400> 3157

actcgagtgg tgggaaaacg ttcgacgca gattgtcgtg agaaacagaa aggaaccttt 60  
 tttcacaacc agtaaatagt tacatggata caacatcggt catatattat agcaactttt 120

cctgttgtag acgacacccc aactttatct ctgtcgctaa gcaactaccg aaagcacgaa 180  
aactgagaac agtaaagtcc aaccagttgg tacagctatc ctgcgtgttg aaatcgaacc 240  
cttttttcca aaaactatct ctaatgaaaa cactagaaga cagtttggag aaaatgtgga 300  
gaaatagcaa ggccctcgctg gagaaaaggt cgatggagta catacagtgt tcagcgtgta 360  
aagcagtata tccagtacag gcaaatatgt ttggggaaaa cgggagatat gtgcgttgta 420  
tagtttgtgg aa 432

<210> 3158  
<211> 400  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-062-Q1-E1-F2  
<400> 3158

agcaacaaca ggacggaagt aaacgcagtg gaagccttgc tttgggcaa catgtgcttg 60  
tactccttca atatcttctt ggccctttttg atatactggg ttggtgaaac cggaggctgg 120  
attcctaccg ttgcagacta tcgcgtgttg acttctgtgg agaaggatca aactttgtcc 180  
aaaggagcgg agatgcatca agaagagtct gcataaagga ctatttttgt atagttgcca 240  
tcatggacgg tttgtgtgga aagttgtgat tgtgtagaga gtgtgtttgt gagttgtgtg 300  
tggtattgtt gttttacgtc tttgtgagtg accactcgta cgagtgtgat gaatcctcac 360  
aaagatgata gaagacaata aaacgatggt gttttgggtat 400

<210> 3159  
<211> 354  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-062-Q1-E1-F3  
<400> 3159

acaccgtttt ttgtgggttt cactcgtgtg ttttgtcttg ttaaaactcg aagactatct 60  
atttcttggt atgttttaga ggtgtttcta gactcttttt ggagttgtca tactccagtc 120  
ttcgtgggtt atgaatggct ctagtggcaa agagtacttt tactttccca ccattctcca 180  
cagctccaac catcaacttt tatacgacc ttgtatatct gtgccctag tagctaacta 240



attccgcttg aagagattgc aagtttggtg tactaaacaa gaggtgcaag tgtcagtata 300  
agagagtatg tatgtgtgtg tagtgtgttt ttgggagtag gagtacaccc aagt 354

<210> 3160  
<211> 389  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-F4

<400> 3160

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agtttataga acagtgggct gcctatagag aaaactctga atatttatac aaatggacac 120  
caaagcgtgt aataggaatc ggtcttcttg tgggcgtgat tccgtattac ttgtatcgct 180  
acattgtgta cagtgtggaa aatcagtacc caaactatgg agctgcagag tatggtttac 240  
tgggaggttc tcctccaaag tactcgagtc aagatgatga aaataagtaa cttgacaacg 300  
tcaccaacga cctaaagttg ctctgttggc gtattatatg aaaactttat aaacaagttt 360  
atTTTTTTTc taaaaaaaaa aaaaaagaa 389

<210> 3161  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-F5

<400> 3161

atgtttcgtt gtggaaaata aaatttttgt gttgaacata aaaaaaaaaa aaaaaaaaaa 60  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa caaaaattaa aaaaacaaaa aaaaaaaaaa 120  
aaaaaaaaaa ccaaaaaaaaaa aaaaacaaaa acaaaaaaaaaa aaaaaaaaaa aaaaaacaaa 180  
aaaaaaaaaa gaaaaaaaaa aggggggggcc ccccaaagg tttccacctc aacttcccct 240  
tcccggcaac ttcaagcccc cccaaaggtg ccccaaatt ccattcccgg gcccttcttt 300  
ttaaacgttc gaaccgggaa acccccgggc gttccccacc taaccctt ggaagcaaac 360  
cccccttccc caagctggcc tattccccaa gggccccccc cctcttcccc 410

<210> 3162  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-062-Q1-E1-F6  
  
 <400> 3162  
  
 agcggacgcg tgggttgga tgccgcagaa aacgatgatg ggatacacct ctcccagca 60  
 agcgctgttg cagttagcat ccatcaagaa aaccaccaa aagttaaaga agcacttgca 120  
 aaaatacttg gatgaaacaa aactaagaa cacagaagat gcagaaccac tggaacgtgc 180  
 aaaggcaaac ctcaatttgg catatatatc ggcgccctt ttctacatgc ttcttcgagt 240  
 tcacggggtg gaaacttcag gacatcctat catggaagaa ctgcaaagaa tcaaggaacg 300  
 ttttcaagtg ctccgaaagt taattggaca agaagatact cgttcactgg ttatagatgg 360  
 tgaggcgacg ggtaggattt tagcagccac tctgaaagat ctctcagcg acaaaa 416

<210> 3163  
 <211> 134  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-062-Q1-E1-F7  
  
 <400> 3163  
  
 aaagggggag gtactcgccc cgatggagca ttcttaaaag cagtggaaaa agaattcggc 60  
 tcattggacg ctctcatttc gagcctctct gctacagcta tcggcgtgga cggatctgga 120  
 tggggatggc tcgt 134

<210> 3164  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-062-Q1-E1-F9  
  
 <400> 3164  
  
 ccgatattca tcctcgaagt gatgatggtt gtggtgagtt taattatcgt atggtttggga 60  
 cgatagcatt cccggaagaa cgttcttatc gacttcgaat gactatctgg gatgtgtctt 120

catctcctac gggttccggt cgagacggta cttttattgc agaattgtcaa gtggacttgg 180  
 agccttttgtt aaaggaagct catctaactg gtcgtatgggt atcaagaaag cctcaatggc 240  
 taagggttttc tcateccaac tatccacaga tgaacgcaca tgccaagctg tctctagatg 300  
 tattggatca acacgatgcc aaattctatc cagttgcaaa aggaagacaa gaaccaatc 360  
 aatatccata ttacctccg cttttccgtc ncgtattctt aaatcctctg aatcctatgc 420  
 catttgtgt 429

<210> 3165  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-062-Q1-E1-G10

<400> 3165  
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 gtcgcttttt gtctctcaag tttttgccga aaatggttca acagtggaga gcagcaggtc 120  
 tcacttatct tcgttatgca aatatatgtg cagattttgt tcgcaaggca ctaaaggaac 180  
 cgaaaagaac tgaagcattg tcgaggaccg gttttgagat gacgagaagc gagtggagtg 240  
 aaggcaaggt tgtgaagaga ggtaagtcca cgaacanaac tactagaacg gtgatttgat 300  
 ggagacacct gcagagacc ttacacaaga gaatgaaact agtaacgtcg ccaagagtaa 360  
 caagtgaatg tgtttggtgt aataaacgtc tagaagaacg cgtacgtgtc a 411

<210> 3166  
 <211> 403  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-062-Q1-E1-G12

<400> 3166  
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 agggtagact tagaagcagc aaaccagaga ggaaagcgtt aaagcatgaa agaaaagaaa 120  
 tccgaaaaag aagagaaaaa ggtaagaaag aagaccgaat cagggtgaaga ggtagaagaa 180  
 caagaagaga agagagaatg ctgggtggag ttacgaaaca agagaaggga agtaaaaagg 240

tacgaaagag ggaaagggtta cgacagaacg aagtacacag aacacagtgt aacgcggcgt 300  
cataatagaa atccgaaaag agtagaagaa aagagagaga agacagaaaa gaagagaaaa 360  
gccgtactga agaccgacac aggtactcga ggagaaagga gac 403

<210> 3167  
<211> 403  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-062-Q1-E1-G2  
  
<400> 3167

acgcgtccac ccacgcgtcc gggcggacgt ttttttcgtg aagcaaaca caacaacaac 60  
aacaactatc ggtcgcgcaa tgcttacagt gaaaccccat cacaacttgt tgaaatgggt 120  
atttttcaac atccctgcga gaacgaacta gtttgtaaga gtaccaacga aaagatcccg 180  
ttttttaacg ctccaatatt tctggaaaac aagacgcaga ttggcaaagt ggaggaaata 240  
tttggctcta ttacagacgt tcaactttact gtaaaaccag tggaacgtgt attagccact 300  
tcttttggtg taggagacaa attctacatc ggctcagaga aactgctgcc gcttgacaga 360  
tttcttccca agccacctgg tagtcagagc ggagacaagc cgc 403

<210> 3168  
<211> 341  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-062-Q1-E1-G5  
  
<400> 3168

accacagagt caatggacac attatgtgac gactcgggtg tatcgggcag cacaccttat 60  
catgtcctac tagacacatt actctacagt catacacatg tcgagtgtg gctgtatctt 120  
tgggggggcg ctcaactcag gaagaccgct gtctccagta atgaatggtt tccatcagtt 180  
agacctcatc acgaagacac tatgaactcc ttcagcacac gcatttgcca catgtaacga 240  
actcccgac gtactcacta tttgcagtct ctctctagaa gagcaccaaa acctctcttc 300  
ggaaatattc gctgggtgcc gatccccgtt gctctggcgt t 341

<210> 3169  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-062-Q1-E1-G7

<400> 3169  
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 gagaaacgag tcgtgtcttc cacgggagct ttatccctta gtcaagttcc taagaggatg 120  
 atcgttattg gaggtggcta tattggtctt gaaatgggtt ccgtttggag gagacttggt 180  
 tcagaggtca ctgttttTGA atatcttgat cacatagtTC ctatgcttga tcgcgaagtt 240  
 gcagatcagc tctacaaatc tcttcaaaaa caaaatctaa agtttaagct cggcacaaaa 300  
 gttgttggag tggatagcag tggtagcacc ctcaagttga cagcagagcc atcganaggt 360  
 ggaaaacaag aagtcctcga gtgtgatgtt gttcttgTtg ctaca 405

<210> 3170  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-062-Q1-E1-G9

<400> 3170  
 aagaacttgt agaagaaaag agagagaaga aagaaaagaa gagaaaagcc gtactgaaga 60  
 ccgacacagg tactcgagga gaaaggagac ccaaattaag gtgagagaat ggacgataag 120  
 gaactaggca aaaggatatg gtatctgcgg tagaacatat gaaagaagca gcaccgactg 180  
 tttagcaaaa acacagcact ctgcagaaaa gagaaaatgt aaagtataga gtgtgcggcc 240  
 tgccaaatag tagagaagaa atcgatgaaa gtganagcga gtaaaagatg aggtatagaa 300  
 atggcgttcc taactgtaag gattcaaagg tagcgaagta natagacgtt tganaggcgt 360  
 ccagtatgaa aggagaaacg agtgtagcac tgtctagtcg tcnaactcag cganacagct 420  
 ataactg 427

<210> 3171  
 <211> 394

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-H1  
 <400> 3171  
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 ggagtttagaa acatatctcg agcgtctaca aagacatgca caacagcttg aggcggagct 120  
 tgtacgtgtt cgacaagcta tggcccaagt tagtttctat cttcgtgatt ttcgccaggt 180  
 ggaggaagcc aaaagtcgca atgatttttc aaatgtagc gccgtcacag gagagtctgc 240  
 ggaaaatggg tgtctatcaa gaaacacgtc gttctcgtcg tttggctctt ctactgcaag 300  
 gtctgataca acaccacaaa agagtgtcgg cgagaaaagg aggagggtta ataagggatc 360  
 gagtggaaga tattggtcta gtgaagaaca tgat 394

<210> 3172  
 <211> 302  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-H10  
 <400> 3172  
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 gtcattcgcg tggttttggg ttcgtatcct atgcataatg ttcctccgta gacgaatgca 120  
 atgccgcact gaatggcaag gatatgcata gacgcactat tcgtgtgaac aaggcaatgt 180  
 ctcgtgaaca actcgagagt ggaggagact ttcgtcgcgg tggtcgtgga cgatacggaa 240  
 gttttcgttc cggtccttat gagagacgtg aacgtgactc tgatcgtagg atagatcatg 300  
 ac 302

<210> 3173  
 <211> 428  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-062-Q1-E1-H11  
 <400> 3173  
 atgaattttc aggtgttgga ggtgcgtatt cccaagagtt gggaacagaa cagcacttgg 60

agacataaac gttgtaatag aagcaacaca tataggaatc gctcttttat tcataatatg 120  
tcagggttg tttgtcacag agcacttata ttaatagatc acggcagtaa agttccagag 180  
gcaaacgacc aaattgccaa agttgcttct ctagttgcaa agcgggttcc aaatactttt 240  
gttacttttg ctcatatgga attagcgaaa cctgatttga tggaggcttt cactctatgc 300  
gttgaaaata atgctaggaa catcactgtt tgtccgtttt tcttgtttcc tggaaaacat 360  
tgcactgtag atataccgca gatggctcag aactgtgcta gtaagtttag tagagttact 420  
tgtaatgt 428

<210> 3174  
<211> 383  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-062-Q1-E1-H12  
<400> 3174

at ttgagggtt tcttttcgcc cgtgcgatgt taagacgggc actctatgaa cttgtaacaa 60  
ggcttatatc ccaaagttct aaagtagcac cttttaattt tcgctattcg gtagagagga 120  
aattgggaac tttatttcct agttttcacc atactttgtc tgtgcagacg agattttttc 180  
aacagcccaa gagttgctgt ccgagacggt attgttcgtc caactccgga aatgaaagag 240  
gagtcctagt tgattcagac aagtcaagta atccatctgt tggaaaaagt gaaggaatcc 300  
ctatatttgg cagagaagag tcagatcctt ctcaactggg aagagattat attcgacttg 360  
tgtcgctact tgttcgtatg cca 383

<210> 3175  
<211> 431  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-062-Q1-E1-H9  
<400> 3175

agcttgga aaagctctgtt ggaagatgac cttgatgttg tttgtgactt tcggatcacc 60  
aaactttgta gcacacaagt ctaaagtatt gaataccaga aacaaattac agaggcagtg 120  
tggctgcgtc aacacaaagc gtgataaaag gactcaagta ccaaactt gggttatgac 180

tgaactaca ggagtcaagc ttttgaatgg cgaacagaag atggagatga aggcaacgaa 240  
 agaagtcaaa gttggagagc gtgtttcttt ttgcaggtgt tggaagtcag caaagcatcc 300  
 gtattgtgac ggttcgcaca acaaataaa taaggagacc ggagatcatg tgggacctat 360  
 tgtagtagca gcagtgcagg ctacagaata gttttattgt gttttatttt caataaaggg 420  
 tagcagtttg t 431

<210> 3176  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-A11  
 <400> 3176

gggtcgaggc acgcgtcagc ccaagcgtcc gccacgcgt ccggtgctga gcgagaggca 60  
 aggtgttatc atggcaaagg cagtgagaat tggtgctgaa gggtacaggt taaagttgga 120  
 cggtgcagtt caagagatag acggtcgttc tgtagtcctg gtagatgtgg atagtattac 180  
 ccctctcatg tttggaggta gtatgaaaga aaaggccaaa ttgttggtatg ccaagtttct 240  
 aaggagagta ttatgaggag aacaaggact tcttcttctt gtcgactaga gaagagaaga 300  
 aaatgtttgt gacgttacaa cttgccaggg aatatgcaga gctggtagat gacca 355

<210> 3177  
 <211> 199  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-A12  
 <400> 3177

cggtcgggc acgcgtcagc ccacgcgtcc ggaacgatgc gcagtaatgt cgcgattgtt 60  
 ttctttggtg gacaaggata aagttgctga tataagagaa caacagaaaa gaataacgga 120  
 caagttgtct tccaataccg caaaagtgga tgagtgtgtg agggaactga gccagttgta 180  
 tgaggaaacc tgcagtgc 199

<210> 3178  
 <211> 167



<212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-A3

<400> 3178

gaatcggtag aatcaatacc tgcagcgatg taagagcatc tttcctgcaa tgtgatatca 60  
 tggagggtga gaatcccgtt tacctctttt ccttgcaagg cagctgcgtt accatatttc 120  
 atgttgtgga gtctgggtgt ttgggagtag atccgtaaat ttgttgg 167

<210> 3179  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-A5

<400> 3179

agcgacagga gcactcgaca ttggactgaa ctacgaagaa taagactctt tgtacaaaca 60  
 caagaaaaaa agatcaactg ttaaagctaa ctgcttgctg ttaccaacca ctgcgcgatt 120  
 tgttgtgctt gtttctggaa tatcgaaaat tcttgttctg tgtctacttt ttacttaggt 180  
 gtcaccaacg tgcagcgaaa ctggtaaata gaacacgtgc ccagtcaatc tgtgcaaaca 240  
 ctcttgtgcc aaatacagag ggtctggatg agtcactatc ttctgagaat gttttgaagc 300  
 atcttcctt ggaagagaat gtcgtctcga gttttgtgtg tggaaagaac gtttcagttc 360  
 aaagcaactt atcttcaata 380

<210> 3180  
 <211> 386  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-A6

<400> 3180

agcccacgcg tccgcccacg cgctccgcca cgcgtccgcg caagtgattt cggaacaaac 60  
 cattgaagaa aaagaaacaa cgaaaacagc tgttattgca aaagatcttt tggctggaac 120  
 tgcaggagga actgcacaac ttttagtggg acaccggtc gacaccatca aagtaaaact 180  
 acagaatcaa ccttgggtcg ctccaggaca gactccacaa tataccggtg caattgatgc 240

agtaagaaaa acggttgcaa gacaaggcct tgggggtcta tacaaaggaa tgggagctcc 300  
 actggctttc gttgcagttt tcaacgcagt tctgtttgct tctaattggc aaatgaaaag 360  
 aatcgtccac ggtgaaggta acaact 386

<210> 3181  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-A8  
 <400> 3181

agcccacgcg tccgtatttt ctataaatac caacatacat attgtattct gtatgtttgt 60  
 ggttgctttg aattgcttac cttggctacc aaaaacagtt cgttcctatt ctttttttgg 120  
 ttatacacc aactcgaaaa ccaaaccatc gaggaacttg gtgacttggt tgaaaaagga 180  
 gcgccataac aagaataata acactacgaa taataattat cattctcatt gtaaagagtt 240  
 acccaatatt gattccaaaa ctttattgag tctaggactt gatatacata ccaagtctat 300  
 agggtttgcc atagtctctg gatggacagg tcaagcaatt cgtcacggta tgatccaact 360  
 acaacatatg gaaggagccg atgtttttga taaagttgac 400

<210> 3182  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-B1  
 <400> 3182

acgcgtacgt taagagacta ctgaaacacc aaagagaatt cgtattactt tgaccagtaa 60  
 aaacttgagg gcagtagaag gagtatgcca agaactcgtt caaagagcaa agatgaacgg 120  
 cttgagagtt agagggtccc ttcgaatgcc gaggaaaact ctgagaatta ctaccaggaa 180  
 atccccctgt ggagaaggaa ccaatacgtg ggatcgcttc gagctaagaa tatataaaag 240  
 agtagtcgat atatttgcca cggctgatgt agtgaagcaa gttactgcat atggtttcga 300  
 ctctgaggta caaacggagg ttactattag cgattagata gactgcaaga aaaataaaac 360  
 aggcgtctcg tgggaattta aaagaaaaca caaaaaaaaaa gggggg 406

<210> 3183  
 <211> 403  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-B10  
 <400> 3183

cgcgtacgat tacatttcac attctccttg tagaaaacta tgaagtcttt cggaattgct 60  
 attgttttcc taagctttgt tattgcatct tatgcagcag ttgtatccga aatggcatcc 120  
 aatgagtttc aaagaggagg atacgctcct tctccttcca aggaatgctg catgaccact 180  
 tgtcaatatg cagaactttg cccaatttct caaccaactt atagccaagg ctccatctta 240  
 cattccatct cctacctatg gccaaagctcc ttcttacaat caatattctt cttcgtacgg 300  
 ttctcttagc tatcgtctct taactgcaga cgaaaaccaa cttgtgagca gaggagggtta 360  
 tgcaccaaca agccaatgta ttctagttcc tatccaatgc tgc 403

<210> 3184  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-063-Q1-E1-B12  
 <400> 3184

cgggctgggc acgcgtccgg cgtttcgtat ggatcgcaaa caatatcgag caagtgatag 60  
 aactgggtcg tattttgaga atagaaacgc cgactatcga aaccatggac gaaaatatgt 120  
 ggcttcttcg acaaataaga agtttttccg gcgtcgagtt tattcaccta ccttggacac 180  
 tacaaggaaa gaaacgaagg acgcttattg ggaacanaca agacaaactg ccagtggcac 240  
 ccagcacaaa atataaagac gatagaagtt cgacctatgt aaatagccag gaaagttatt 300  
 caaacttggg cacggaggaa agggaatccc cagcaactac tacagaactt gaacaaactt 360  
 catcctgnga cgctcgtgt gtgaaagac 389

<210> 3185  
 <211> 394  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-B3

<400> 3185

agcaagcaaa gaagtgacgc agtagatcag agagtaacac atgcaagtag gtaaagcgaa 60  
cgggtgagta aagaggtgtg aaagagtggg agaacatgaa agcaccagag gatgttagaa 120  
atgggtatag ttaaaaccct taaggagtt aaagcgcgga atctcagaag aggaaagcca 180  
cattgtggac tgagaaaaag tgcaaacacg agaagtcacc actggggaaa attgggcaat 240  
gtacagggaa gtatgacca gtaatgagga gtggagtaaa cagaaaagga agtaaaagga 300  
gggaatgaag ggaagttatg gcaaaaacac gtgccagcag cagcggtaaa acgtgtgtag 360  
caagcgttga gcagaaaaaa ctgggtgtaa aagt 394

<210> 3186

<211> 260

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-B4

<400> 3186

gataatgata ataggaggga gtagtacagt aattgtaaaa ggaaaaggaa aggaaagaaa 60  
gaggaaaggg ataaatgca aaaatcccaa aaaaaaggca cgaaagaaaa gaaaggaaga 120  
cccattaaat aaggcaagaa accataggaa ttaaaccgga taagaaacc ttttatccaa 180  
gccattaaag aaacaattaa ttataaaaaa aggaattcat tcaacaaggg aattaaaggc 240  
ccacaaacaa accccaaacc 260

<210> 3187

<211> 369

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-063-Q1-E1-C11

<400> 3187

cgcgtcaggg ggaaaagang acgaaatgcg agctgcattg agtttggcta tttcccaacg 60  
ggagttgatt ggatcgtttc ctgtatagtc tattcatggt gatatctttt gccattgtc 120

atTTTgcact tgtaaacaga aaaggcattc agacaaggaa atattgctct tcttgcaang 180  
gaacgtatTT ctgtagttgg caagcttatt ctggagatga ctggatatct ccatttgcag 240  
tggaagtcag acatacacta tTTtaataat catagcaacg gtggtagcag taataatagt 300  
gaaagcccaa tttcagcacc tagaatactt gtattatatg gttcgTTaag acaaagttct 360  
ttatcccgga 369

<210> 3188  
<211> 382  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-C6

<400> 3188

ggcattgtgg ttgcaaaggg gtttgtatag gtgggagtag tgaagataag caacaagaag 60  
aaacatgaca agcactgtac tagttgggaa atggacaagt ttgctacgtc caacgttggg 120  
aaaaaacacg gtaccagtaa caagctggag gaggggtttc gcttcccttt ccccaaagga 180  
ctctcctgtt cctttgtcca aacctgaggg ctcgttagaa tatgtagttt ccaagttgga 240  
cgacctttgc aattgggcta gaagcaattc cctatggcca atgacttttg gtttggcttg 300  
ttgtgccgtg gaaatgatgc atgcagcagc tcctagatat gacatagacc gcatggggat 360  
agtctttcgt ccttcaccta ga 382

<210> 3189  
<211> 377  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-C9

<400> 3189

gcgtcagccc aagcgtccgg cttgggagaa acggatcgat ccctgttttg caagagacaa 60  
tgagcagcac caactccacg acttgttcgc ggtttcaact tttacaagct gcttttgaca 120  
aggcggtttc cacgtttcta gaaaacggct gttcttactc taagttttcc gagttcttcc 180  
agcccgttgc ctctgtttat ccagaggaat ttgagctgtt gcataaaciaa cttccaaciaa 240  
ctcttagata taagactaaa gcaagaattt cagttattgc tccaagataa agatattgca 300

actaaactcc aggtttgcga ccaactcttc caaacgtatc atgtggatag aaacggttat 360  
gtgagaatac ctttgaa 377

<210> 3190  
<211> 383  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-063-Q1-E1-D1  
  
<400> 3190

agccacgcg tccggttgcg aagcgttgct gttatcgtct atggcggat ttgaaagtga 60  
tatagttggt cctgcaattc actttacgaa aaagtataat tcaaggaggc gctacaagga 120  
gtgcatttcg tgcttttagtg cttcgggtgg taaaccaggg tggttctttt gacataagcc 180  
gaaaattact cgcaacgggc tatacgactg ataagggtat gaagaccaat aatggtgctg 240  
ttcgagaaag tgacttttac gagagagtct tttcaagaat agcttcaaag cgctctgact 300  
tttggaaga agtttctgta accttagtag tctctaccat tgacaccgag tcggataagg 360  
ttatttcagt gtggaacgcg ttt 383

<210> 3191  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-063-Q1-E1-D10  
  
<400> 3191

cgcgtacgcg gaagcgtggg agagattgga agagtcgtcc tggatgaacta tggcaaagac 60  
cgaggcaaac tgggagtcac tgtggatgta gtagatcata atagggcggt ggtagatggt 120  
ccactcacgg gacttgcgag acaaaccatc aactggaaga gcttaacgtt gaccccgttc 180  
aaagtaaaga ttcaacactc cagtcgtaca ggagttgtga gaaaggcatg tggaagaggc 240  
gaaaatcacg gaacaatggc aaaatacggc gtggtataag aaactttgtg cacgaagaaa 300  
caaacaaaaa cttggagact ttgatagatt caaagtgatg attgccaaga agagaaagtc 360  
ggctatgatt catagt 376

<210> 3192  
 <211> 337  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-063-Q1-E1-D11  
  
 <400> 3192  
  
 caattctcgt ttttatctta cttgggcaca gattgagttg cgtgccaaaga attatgaaga 60  
 agctgctcgt ctcgtctctt tgggtggagcc attgggacct accaatgtgt atctatggca 120  
 aacctatgct cagatagaaa gtgctcaagg tcatttggga caagcctatc attactatctt 180  
 gaaggctctt gagttggatt ccaacaatgt aaagagttat ggaatgtctg gcaaaattgg 240  
 tagccaaaaa gggtaatgtt gatgaatcaa ggagtatttt tataaaagct attgagttgg 300  
 tcgaaaaaga tgcccgttta tatgcatggt tggccaa 337

<210> 3193  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-063-Q1-E1-D2  
  
 <400> 3193  
  
 acggcaacgg aagacacggt tgtacaactt gcgaaaactt taggagatgg gaaaacgccg 60  
 caagttatga gaaaaagata ttcacagttg ttgcgggtggg tacagcaatc ttccaaatct 120  
 gtccatcgtt acaacaaatg tgagacttga atgttggttaa aagtttattc tccagagcgc 180  
 ttgaatgggtg gttagacgtag ttgtaataat aataagtcac aactgggtgtt tcgtccaatt 240  
 gtttaaggaca tcactaaata cagttccttg aacggcataa caaaagtcgt caaactgaac 300  
 gttacagaaa atcttatgga agctttccac actgctccat tgtaaagtta tatgtcttga 360  
 aaatgaaagg ttataacaaa tatcaaaata aa 392

<210> 3194  
 <211> 379  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-063-Q1-E1-D3  
  
 <400> 3194

cccacgcgtc cggtcgattg aaagtggaaa aggaattgac tggtcgactg cggaagcctt 60  
 ggcaattggc actttattgg cagaaggaac aagtgttcga ctgagtgggc aagatagtga 120  
 aagaggaact ttttccaac gtcattcggg ttggatcgat caagaaaatg aagctgttca 180  
 tattcctttg aacaacttgg gaatgacgca agctcgtttc caagtctgca attcgagtct 240  
 ttcagaatat ggcgtgatgg gttttgagtt gggatactcc ttggaaagtc ctaatattct 300  
 agtgatatgg gaagctcagt ttggagattt tagtaacggg gctcaagtta tcattgatac 360  
 ctttttagcc gcaggagaa 379

<210> 3195  
 <211> 364  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-D7  
 <400> 3195

agcagacgcg tccgtcaggt cgatcatcag atgtcggagc caatggagat gtcgcttggc 60  
 gtgtttcaag ggaccctaaa gtgcgacgca gactgagacg gtgattgcgg tagcacttat 120  
 cagttgaact ttaaccagta tggtcaccat ttcaagtgc ctttcgacga gagaatgtgt 180  
 tctgcacatc gtgttggggc tcgcgtcggg tctcgtctca agggagaccc tctaggacag 240  
 tcacaaccta tgtgaagaca atgggggtgc gaattgaatg gatacagttg tgacgatagt 300  
 tgtcaacgta tgcacccgtg tcagcatact gggagacacg agtgtagaac cgtcgcctca 360  
 tcgt 364

<210> 3196  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-D9  
 <400> 3196

ggtcggccac gcgtcagggg aagaagaaag tgctgctcgt aaacaagcac gaattgattc 60  
 tgggtgaagaa actattgttg ggggtgaacaa gtatcggctg gagacttcat catcatcttc 120  
 caatacagac tcttccagtc agaagtctga acagttggaa atcttgaaaa tagatgcaca 180



acgagtacga gattctcaga tagaaagaat taaaaaagta aagagtagtc gagatgagga 240  
 gaaaagtga ggcgtgtctg atggagctgg aggaagcagg aaaagataaa agcaagaatt 300  
 tattggaggc ctacagtaaat gcagctagag ccagatgtac tttaggagag atttgtggtg 360  
 cgctggagaa agtatgggga agacatgttc ccaaagatg 399

<210> 3197  
 <211> 375  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-E1  
 <400> 3197

cccacgcgtc cgdgaagaag atgggtccaag agatgcgacg agcgggttgct tctcacgctt 60  
 tacgtgcata tgtccctggc aagtttactc gttccgtact aagtatcttg tgcattataa 120  
 gtgcaggtgt tattgggtgct gtgggagttg tttgttttat attctgtagt atcaatccga 180  
 gaaacgttat catcaatgta tatctcatta tatttgcagt gttgataatc ctttccgagt 240  
 tgggtttcag ttttctgttg aagcggtttg cgtttttaga tacgtttttt ggacctggaa 300  
 tattttacat tttcgtgggt ttactggcag tggatacgca ctggtttcag atattggctg 360  
 gtgtatttgc tgccg 375

<210> 3198  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-E2  
 <400> 3198

agcccacgcg tccggtaaaa tatgtcgaac gaaccaaata tttgtgaggc gttggagaca 60  
 gctcacaaaa cgtgcctccg taaagttaaa cgagctcgga acaaggaagc aaagttgaaa 120  
 gagtgtcaga gttattttga tatgctgaag gataatagtt gcccttgga acctgaaaca 180  
 agcaagcagg acgctgagaa atagtgaagc taaaatatca agtagaagga aacatactga 240  
 ttttaaggaa acgaaggaag tttgcagtta tatttgtact agtaacaagt atcaaccttg 300  
 ctgcctcctg cgtttcacia gactatTTTT ttacaacaaa gtaggacgca agacagggat 360

atacagtgtgta gcactacctc ccttttggag t 391

<210> 3199  
<211> 390  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-E3

<400> 3199

agacattttc cacttttatg ggcatttgggt ttgcgaagct ttggcgaagg ctttatcgga 60  
tacaggaact taaagtatgt atgatacgtc ttgataatgc acgcaagact actatactgt 120  
atcgacttca tttgggagat gtggtaatca caacacccac tataagaagt aatgtagaac 180  
aagtcaagtg tcgaaatctt ttatttcaag tatgggactt gggaggacaa gacagtcttc 240  
gtgaagcttg gcaaacttat tttgtgaata cgcaagccat tattttttgtg gtggacagtt 300  
gtgatagaga aaggttcgat ttgtctagaa aggagctggt gagagtttta cgaatggaaa 360  
atctatccaa ggctgtgttg ttggtttttg 390

<210> 3200  
<211> 130  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-E4

<400> 3200

agacaaagtg gagctattgc caggcacttg gcaaggaaac atgacaaata tgggaagaca 60  
gaagaggaaa aagccttgaa cgatatgctt tatgatatga ccgtcgatat tcacagcata 120  
tacctaaagc 130

<210> 3201  
<211> 180  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-E9

<400> 3201

actgagtatc aggaagaaaa gagggagtag atgaggaaag aaagatcaag gaagtaagag 60

taagagaagg agtaatgtga atgaaagcac gaaagtatth gaagaagaga gtgtaaagcg 120  
cgtacctttt gcataatgtc ccagcgagtg aaagagtga gacaaaagaa agaaaaagaa 180

<210> 3202  
<211> 292  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-F1

<400> 3202

ggaagcagac cacacgaact ttggcaatgg catattctgt ttggataaac tggactgggt 60  
ttccaacaga aaattggaaa aggttgcagc tctgccgtga ccgagatgct gcaaaagtaa 120  
tcgttgacac gttggataga ttgacggcag tcatttcggg catccgtcat cctgcaaaat 180  
gctttcgtct aatgtctcac gtgtgaaaaa tgcagtgtta cgaagtgccg atcgcttgta 240  
actttttcct acaaaaattc tctctggaaa attaagtcga gaaatatcaa tt 292

<210> 3203  
<211> 372  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-F11

<400> 3203

cacgcgtcag agcagatttc aacggatatcc tgthtgaagg agggaaatag gaggttgtca 60  
aggtcggctt tgtagctcag cagccttggg agagctacag taccaatcgt cgcagcttat 120  
tacgtacaaa acgtggcctt ggtcgtactc gaaatgtttt tatgacagtt acaccagata 180  
ggaaacttgg gacctctggg ccagttccac ataccattgc accctcttgg tggaaaactt 240  
tcggatgaag agaagaagag agccatgcag gtaaataagc ctgaaggagt tacattttct 300  
gcaaagtatg tggcttttga ccaggacgat gattccgaat atgacttgaa tcaagtcgth 360  
tatccagcaa ag 372

<210> 3204  
<211> 388  
<212> DNA  
<213> Cyanidium caldarium



accgatactc ctttgtggag aagtggaccg agaggaccga aaacgctttg caacgcctgt 180  
 ggggtgcgtt ggaaaaagg aaagttgtat atagatggaa agcaagcgtc cccaccttca 240  
 gcgacaatag agaaaactag acaaaagcaa gcaaagggtt acaaagttac cacctcgctt 300  
 cactcccaaa gttatgatag tcttcaccaa agttgtgcag tcgaagaacc acaagcctcc 360  
 aaatatgagg ctttcccaaa at 382

<210> 3207  
 <211> 388  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-F4  
 <400> 3207

agaaagatta aagagtcgcc ctggtcgacc atcaccgcca tttctaggat ttattatggc 60  
 tgcaaatgga tatagtttag acaagcaatc cattgaaaga atattacgag aaattgaaga 120  
 acaaaatcct tggtcacaaa cagtatcatc agatgaaaat ggtgaggtga aaagcttata 180  
 aaaatgttcc acccaaggtc tttacgtgaa ggtttgatat acaagatgta aataatatct 240  
 ttgtgtgata tcaaaccgcg aataaggacc gagatcaaaa atcgcgcttg acgatacggg 300  
 ggagtgcac aagtaaaagt ctctcatctc agacttcgcg aaacattatt aaaagggttt 360  
 ccttatcaca acttatctcg aaataata 388

<210> 3208  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-F7  
 <400> 3208

ccacaagttg atagtgagtg gaggagatga acctttcctt tatatatggg atactcgctc 60  
 gggaaagctt gtaaacaagt tagatttggg tgccattgt atcaagtctg ccgaaatata 120  
 gagcacgggt tcttttacca aattaactgc agtaactgga aatagtttac aattttggga 180  
 cttgaatcaa ttatgtagaa tggacactat gtctatttca caagatgcag aatgtgctag 240  
 ctcaagtgga aatcacgtcg tcgtcgggtg tcgtgacttg caaattcgac tctatgacac 300

aaatacaaaag caagtgctac atacttttca tggatcatcat ggccctgttt ggtgtgttcg 360  
 tttttctcct ttaagttatg ggtttgcctc aagg 394

<210> 3209  
 <211> 227  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-F8

<400> 3209

agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60  
 aaaaaaaaaa aaaaaaaaaa aaacaaaaaa accaaaaaaa aaaaaaaaaa ggaaatcaaa 120  
 aaaggggggg cgcacctga ggttctagtc tttttttccc cgtccagcca atttttagacc 180  
 ccttccattg ggtccctaaa ctttcatttc atggcccgtc gctttta 227

<210> 3210  
 <211> 326  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-F9

<400> 3210

tgtggttaag tttattacca ggagtgcctg ttggatgttt cattataggc ttttaatttcc 60  
 gagctagcaa catccatgtc gaagaatgaa tttacatttg gggatcata acatattata 120  
 tgttttgggg ttctggtatg ggaccttatg cttgggtact gggatcggta atatatccaa 180  
 cttatattcg aactgaatga atggcgctag ttacttttgt ggacatacat tggaaacttt 240  
 aataacaact aatgcctttc caacaataaa agaacaatta atggctcaag aaatttcaat 300  
 gggttttaag gaaggtttgt taacaa 326

<210> 3211  
 <211> 285  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-G1

<400> 3211

agttctcttt caaaatccag tcacaggact tggccttgca agtatttgga tcgtattggt 60  
 aggttctctt agttattcta tagtgcgctg tagagagatg atacaaaagg cagtccaaga 120  
 acgtttacca gagaaagtat gaagttgctg attttatttt taggagacac tggagttggt 180  
 aaaactgtaa ggtgaaagaa gattggtatg tcttagtaaa ctcatagagt tactaaaaaa 240  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagag agaag 285

<210> 3212  
 <211> 61  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-G11  
 <400> 3212

aacacagcac tctgcagaaa agagaaaatg taaagtataa agtggtcggc ctgccaaata 60  
 g 61

<210> 3213  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-G12  
 <400> 3213

cgcgtcagcg gtagcgtggg cggacgcgtg ggcggacgcg tgggaggacg cgtgggggtg 60  
 aatgagtgcc gtcagttgta tgaacgagcg gcttatttga cagattcgga actgcgaagg 120  
 tttcggttgg aataccattt agaaatgaac agagcgcttt atcgacttgc ttatgaacac 180  
 tggaaagcac atatggattc gggcaaaagt tgggagcaag ttttcagact ttgtttacaa 240  
 acagcgcacc tttttgcaac tacaaagtgc ccaacgataa tatatttata tattacttgt 300  
 ttctcgaacg gtatctcgaa tttcttccat ttccattct gctttgcctg tcaacctcaa 360  
 cagcagattg tgatacctcc aaccaagttg tg 392

<210> 3214  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-G3

<400> 3214

agcactgata cattgtttac caaggaaaca ttcataatcg aaccaaaaaa acgagctgaa 60  
aacgctttgc atagtctctc tttctttcaa tgtttcttac cgcaaactgc atttggttta 120  
tatttcttct gaaacttggt taacgcaagt tggaacaact cttctgcagc gttcggggga 180  
catggaacga tgaaagcaaa ccttgccctg gttcttgaac gaagtgtgta gtgtaaaactg 240  
tgaaactaca gagtattata aaaagaacgg agttcgtgag catccatacc aaatatgaat 300  
tcaccttgga tatcgaaaac actccttttc cgtctttctt cttcagcttc ttcggaaagg 360  
gctttcattc gcagttt 377

<210> 3215

<211> 373

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-G5

<400> 3215

cccacgcgtc cgcccacgcg tccggacaat acctagggaa tatgttgaat tggcaacttg 60  
gcgttatcaa cagtttaatg ttcgaagagg tgcactgttg aatagggagc aaagcaagga 120  
atcagaacat tccaagttgg agagttactc aggaaagctg ggaggtgaat atttttgttt 180  
gtggtttagt gaaaatgttt ttagtgtcga cacaatagaa gattatcgca agattgcagc 240  
gcatcattat tggcgtaaga agaattgggca taacgttaca aaccaaacgg aaaacgacga 300  
atctagtaaa agtgccgtta ttttggccga gagagaagag aaacaattca cggattcgggt 360  
atatagtgag aaa 373

<210> 3216

<211> 372

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-G6

<400> 3216

ccggctcgac ccacacgtcc gctgagagga ggaaagccac attggaattg agaaaaggtc 60



caaacaagag aagtcagcag tggggaaaat tgggcaatgt acaggggaagt atgacccagt 120  
aatgaggagt ggagtaaaca gaaaaggaag taaaaggagg gaatgaaggg aagttatggc 180  
aaaaacacgt gccagcagca gcggtaaaac gtgtgtagca agcgtagagc agaagaactg 240  
ggtgtaaagg tcgagtagta gagtaagtgt aaaagggaaa ggaaaggaga gaaagaggaa 300  
agggatgaaa tgcagagatc tctagagaaa ggcaagaaag aaaagaaagg aagacacagt 360  
aatgaggcgc ag 372

<210> 3217  
<211> 369  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-063-Q1-E1-G7  
<400> 3217

gaggatctcg taatgaagtg gaggttgata gcgcgttttc atccaatcga cgtcaagacg 60  
tccatcgaga gtttgtaaac acggagagct cccattctcg ctggaaggac aacaataacc 120  
atgaggttgc ggacaattcc atttcgagtg cctcaagaag aaacgtaatg atggttggta 180  
gttgtagtga gaattcacgt tcgttcccgg caccaagtag aattcgaaag tccagattcc 240  
atccatcagc gagacagtgg agtccgaata agaaaccgcg tagaaatttg gatgcatggc 300  
gtgactttcg gaaacagaat ggatggcact gacacgcgga agaaagaatg tcagagaggt 360  
tggcggggtt 369

<210> 3218  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-063-Q1-E1-H1  
<400> 3218

agtgttggtg gtggaaggcg taactttgtg ggtttcctta caagatgtct tttatatttc 60  
gtggaatcaa aggcctttcc aatcctcggt atggacaacc cgtggattta cccaccggaa 120  
taatgtatag cttgaagcaa atgtcgtaca ttgtccagtt tgctttttct gttgtagtca 180  
ttgctatggt ctccaaggt acctttttatc tataccgtga ctttaagtgt gctttcgtg 240

ggcattggga ttacgccacg catagcgaag tgtctgggtcc tgtgggttat tgccgttact 300  
 tcattgcttt ggggagcatt tccatcgta ttttagctat tggtgccgta gctacttttg 360  
 gaacgctgta ttttga 376

<210> 3219  
 <211> 206  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-H10  
 <400> 3219

cacgcgtcag acacaatttg aagtttggtg ggcaagttga gcttttgtat tagcaccttt 60  
 tttgtgggtt ccctcgttgt gttttgtctt ttcaaaactc gaagactagt tatttcctag 120  
 tatatttttag aggccttttc tagagtttgc ttttggaatt gggaaaaccc gttcctcgtg 180  
 ggttgtaaag ggttttatca acaaaa 206

<210> 3220  
 <211> 318  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-H11  
 <400> 3220

tcttgaaaga cataactgca agtattgaaa agcctgacat aaaatggata actaggacga 60  
 atctcagta tttgtgaat tctgcagaag gaaatgtcac gggtgacttg tcgcggcagt 120  
 gtagcttgaa ggatatattt tcattgaagc ttctcgacaa taactttaag ttggcgtggt 180  
 ttaatgatgc cttgtttttt agttttacca ggcttatact ttgttattac tggtaatcgt 240  
 atattctgta gacgctcgga cttgaatgaa acggaagcat tggagtcctg cttttcgttt 300  
 atgaagatat gccccacg 318

<210> 3221  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-063-Q1-E1-H2

<400> 3221

aggagccaac caccaacaac acgagatgac cgactccacc gctgctagtt ggagaacgag 60  
tacttcacct tcttgttcca ctttcttatac atggaagcgt ctttatgggt tgtatcaacg 120  
ctatatattg cctgaatatc agaaacctct gttgtatact ttcctaggaa tattattttct 180  
ctccttgtgg cgactcgtat ggaaagtatc tcctctagac ttgtttcact ggttggacgt 240  
ggaatattat ctacaaaatg aagacggcac tacatttggga tatgtatatt ttcctttggg 300  
cactattcta tggtttatta tcatagtgc tgtatttaca aaggtaacca accgtcttca 360  
gtctcactat tattctagaa gaacgagttt gatacttgtg tgtgtg 406

<210> 3222

<211> 358

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-H8

<400> 3222

ggcgggatcg aaactaacga tcgtggactt ttcgactaca tgggtgtggtc catgcaaagt 60  
tggtgctcca aaatatgaag aactcagcga aaaatatcaa caagttgtat ttttgaagg 120  
tattggggac aagaatggag aaaccaacaa aataatgaag tctttcggtat tacgagcagt 180  
accaacgttc aagtttatga agggaaagaa aagtattcac gaggttgccg gggcaagaat 240  
cgatgcgttg gaagatggca taaagagcta tatgtagtta cttttggagc aaatgaataa 300  
gcacctttat ctattttcca tatgaagaaa ataaaaacaa tttatgaagg gaacaacg 358

<210> 3223

<211> 338

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-063-Q1-E1-H9

<400> 3223

acgcgtacga tttagaagga gattcagcgc ttagaaaata tattgaaaaa cgaggaagga 60  
aatatcacag attcgaaacg agccaatttt ttgcgtcgtc ttcatatcct aaagtcgttc 120  
ctttcgaatg aaacggagga aacaaattcc taaaagttgc tgtaatgttg tccagacaca 180

gatattgtca ttcacagtga ataaagaaca gaaatgcttg cgaaaaaaaa aaatccaaaa 240  
 aaaaaacaac ttaaaactct tgcaaaggat cgaaagagat cactaaattc actcacagaa 300  
 tcgataaaaa aaaaaaaggg ggggccgccc aaagggtt 338

<210> 3224  
 <211> 331  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-A1  
 <400> 3224

agcccaagcg tccgccacg cgtccgggaa gaaagaggca aatacgggaa agcagtaaaa 60  
 gaagaaagag aaaggaaaaa actgagtatc aggaagaaaa gagggagtag atgaggaaac 120  
 aaagatcaag gaagtaagag taagagaagg agtaatgtga atgaaagcag gaaagtattt 180  
 gaagaagaga gtgtaaagcg cgtacctttt gcaaaatgtc ccagcgagtg aaagaggaag 240  
 caaaaaggaa caaaaagaag tagccagcta agacccgaga cctagtgatc gtatgctgtc 300  
 caagcgaagt aaggctgaac cagtatctgg t 331

<210> 3225  
 <211> 348  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-A2  
 <400> 3225

ccgggccggg ccacgcgtca ggctagcggg gtgggaggtg tttggaaagt gtccaaccaa 60  
 gtgaatccat ctgcactgca gcgcttgga agaatgaaa gagtgcgaag agcacgttgg 120  
 gaactttatg actccaagtt gccaaaggaa cttcgagcac aattaatgcc aagttctgac 180  
 aaggaagtac gaagttttgt ggaaatgaga atacgggaaa tgatattgaa cgagacttt 240  
 gaaaatttaa aaggcaaagg aaaaccattc aactattctg atgctgcagt gaggtagttt 300  
 gacgttgcta tgaagatgct taaaaacaat gatttgaagc caccttgg 348

<210> 3226  
 <211> 360

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-A3  
 <400> 3226  
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 tategttggc ctcatcgtea ggtctttgtg tgaggaatat caacgacagt attcagagct 120  
 atgttcaccg aatgaaagca cgaaagatat gctactagta aacagattgt ttcaaattcg 180  
 ggaggagtcc agacaattgt ctttgttcaa acaaagagtc gattgttttt tgcggacact 240  
 tgaagacagt tggaattgga taaaagagac gaggggagca catacagaag agaagctttc 300  
 cgaggagaat tttgtcggca atagtatgaa gcaagtcgtg actgacacaa tagacttgc 360

<210> 3227  
 <211> 362  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-064-Q1-E1-A4  
 <400> 3227  
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 ttctgtcctt gtgttggttg ggtaatgtct tccgttcgaa gggctagctc aaatacccca 120  
 gctactcgtg caagctcaag tactttcttc gccgctaaca gaaactcagc tgtgggttca 180  
 aaatggagtg ctggtaatct atcgggttca gcaaagagaa ttcaaaagga gctagcagaa 240  
 attagtttag acccccctag taactgtcga gccggcccaa aaggagataa cttgtatgaa 300  
 tgggtcgcta cacttatcgg tccagcaggg tcaccttacc aaggaggtgt cnttttcttg 360  
 gg 362

<210> 3228  
 <211> 334  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-A6  
 <400> 3228

aaggagatag caaggggttat gaaaatttta gtcagtgtaa agcgtgttgt cgactatgct 60  
 gttaaagtgc gagtaaaacc ggacggttcc ggaatagatc tcaacaatgt gaagatgtca 120  
 atgaacccgt tttgtgaaat agctgtagaa gaagcggtag gtttaaaaga gtcaaaagtt 180  
 gcatcagaag ttgttgttgc tactgtggga ctttcgcaat cttctgaaca aattcgtact 240  
 gcgttagcta tgggggtgctg accgagggcat acatgtgcaa gtggaacaag agttgccgcc 300  
 atccatcggt tcaagagtct gtcaactcct tttt 334

<210> 3229  
 <211> 311  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-A7  
 <400> 3229

caagtattca aataccaagt acaatacagg ttaccattt ctggatgcag tgtgaagaac 60  
 gtcagatagt cttcatagag cagaaattaa ttccgggaat tattactata taatcaaagc 120  
 tcttacttta cgatgtaggg acaatctgaa agtgctctta agatagaaac ttctctcaga 180  
 gtagttgcgg ggacgccttc gtcttcgttt accaaaaggg tctttttcag tgcaacaatt 240  
 tcgtttgttc taatatcttg agctttatac acctttccat aagtaccttc tcccaaaaaa 300  
 aaaaaaaca a 311

<210> 3230  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-A9  
 <400> 3230

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 ttggaaagct gcaaatgtat tgcgttgga ggtcctgaag aaaatgagga agagatgacg 120  
 gatgaagtgc aagtgaagaa ggaagatgca gatactgcaa taggtccatt gaatttgggt 180  
 atgattgctg cattttatta tatacgatac acgacagtgg aactgtttgc ttcgagccat 240  
 aagcgaaaag attcgtctga gaggtctcct ggaagtgtc tcttccgcat ccgaatatta 300

tactgttcct atacgtgtag gtgaagatga aattttaaga agatagcta gtcatgcccc 360  
gtttgctcct attggaagca g 381

<210> 3231  
<211> 334  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-064-Q1-E1-B1  
<400> 3231

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ggaatctaac tgagtaagga aaataagctt aagctagttt ggctggggaa gtaaagccta 120  
agaaagagta aattaggcaa gcaaaggcat gagagaagta taatagcaga agcatgcttg 180  
aagaaaaaga aagagatttc agaaagggaa gaaaagtcag ctatagagaa caggtgaagg 240  
agaactcaaa aagaggagag caccgaacga tcgaagaaga aacgttgggg gtaacagggt 300  
aatgtggtgt tagagaacgt atcaagcacc acga 334

<210> 3232  
<211> 334  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-064-Q1-E1-B2  
<400> 3232

cacgcgtcag gtgatcctct ttcttggcgg catgtactga caagcaaaag taagacatgt 60  
tcttgtctgt ggaaagaaac actttgttcg taccatcata ttccccagcgt tattgtgtcc 120  
atgcttcgta ccacataggt gcaagcacga ggaaacttgt gcctaaatct tctccagtc 180  
tctacgaaat accatcgggt ttaactaggt ggaccattct ccatcgctgt catcattgtc 240  
ttcttattcc taccagtggc taccacaata ctgcaacacg atgtggcaag tcgtctcagc 300  
gcaatacaac ggacgatagc gggaacagca acaa 334

<210> 3233  
<211> 317  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-B4

<400> 3233

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tcggtctttc tactcaaaga agactagggtt caaagcctac catactatga gacgacgaag 120  
cagaacatac aagtgtcggg ttccacaaaa gtttctcccg agtccgccta ataaataaac 180  
tagtacgacg cgtggagatt tggttccttc tcaagcaaga taacagctgt aaaccaatcc 240  
ttttcccagc taacagccta gcaggagatg agcagtttag cggggaacag agcgatacaa 300  
agtttgctgt cattttt 317

<210> 3234

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-B6

<400> 3234

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tctctagtat ggagtagaat gaacttgag tttccgacag attcagctgc atttcatgtt 120  
atgccgtcta tacattttca ggaatcatct gaagaacaag aaggccaag tgggaaacga 180  
acaacatttg gtcccaatga atgggaacga atcgttgccg aagaattgcc ctacaataag 240  
atttacattc ccatgcacgc cacttcgaat ggaccagata ctctattcaa gttacgtgaa 300  
catactaaga atgaaacctt gcttg 325

<210> 3235

<211> 332

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-B8

<400> 3235

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attaggttgt gagattcgtc agttcttata gtgacttggt gcaaagctga ctggtgaaat 120  
gtagtttata tatttcaggt gttgcaagga aagattccga ttcgaatact tgatggcttt 180



tatatctacg tcaaaatggg tctagctagg tggtgttttg ctgtctgtaa agcgtgag 240  
aaaccctggt cagtaagctc tggatcaag tctctggggg cagtcgaata catagcaaac 300  
tctatacgac ttgatagttc gatagagtcg gt 332

<210> 3236  
<211> 265  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-064-Q1-E1-C1  
<400> 3236

cacgcgtcag gccaaagctc cgcccacgcg tctggccacg cgccgcccga cgcgtccgcc 60  
cacgcgtccg gccacacgct cgcccacgcg tccgcccgaag cgtcgaccca cacgtccgcc 120  
atgttttact ggatgctcga aaatgctcct cgaacggact tatagatgct tatcgatgga 180  
gctttccgcg gtgtaatgac ttgtaataat aaagttgggt tgcttccatt tagtacgata 240  
gacaatcacg gtgtttccat acgtt 265

<210> 3237  
<211> 357  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-064-Q1-E1-C12  
<400> 3237

cccacgcgtc cgcccacgcg tccgcccacg cgccgctgc cttttgtcgt aaatgtattg 60  
tttctgacaa agaatttgaa atgtggggcg atggagaaca gactcgttca ttttgctata 120  
ttgatgacgc tgtggaagga gtgattcgtc tgatggagtc tgactttgct gaacctctga 180  
atattggttc agaagaaatg atatctatga acgaatatgg caaaactcat catgtcattt 240  
gaaaacaaag acctgaaaat caagcatatt ccaggtcctg aaggagttcg tggcagaaac 300  
agcaacaatg agctttgcag gaaggttttg ggatgggaac ctaaaatcag ccttgcc 357

<210> 3238  
<211> 332  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-C3

<400> 3238

agcggaattt ataagacatc gtacagacgg agatattgaa aaggctagac atgatgataa 60  
cgcagatcta cgagatccgc aacctgatga gagtagagta gaggatcctc attggtagt 120  
ggttattggg atttgactc atctaggctg tattcctata gccgacgtg gtgactatgg 180  
tggctgggtc tgtccttgtc acggttctca ctatgacgtt agtggccgca ttcgaaagg 240  
acctgcgcct tccaacgtgg aaatacctcc gtacaagttt agcgaagatg gaaaaatgat 300  
tattggatag tttgtttgga atgtttcgtt gt 332

<210> 3239

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-C4

<400> 3239

ccgggcccgc ccacgcgtca gcgaagaaat caacccttg ttttgggtgt cagatgaaga 60  
tttactgctg ttacaaggca gtccaacttt atctgcttgt cagcaactga gagaaaaact 120  
tgtgagagag tatacatatc tagagaagca tattattcca caaatcccga acctggcccc 180  
tatagacttt agacaatttc agtgggcatt tggattctt ttttctagag ctatttgttt 240  
tcctagtacg aagagaattg cattggtacc ttatgcagat ctgctcaatc agagtccttt 300  
ttgttccgcc tttattgatg aagaaagtat tccacttgga aatgga 346

<210> 3240

<211> 319

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-C7

<400> 3240

aaaagaagag tgcaatgggt gaaaagtaga aacagagtac taaggtagct gtagaggcgc 60  
acttgaaaaa gtggtcacgt ccttttacat gtctacaagt attttttttg cttgtagaga 120  
ttgcaagttt agtgacttg acaaggtttc caagtatcat tcagtgcctt taagcacgtg 180

tgagtgtact tggaactttt caagttgaat aggtagacgt tgttgacgaa agtatgtaga 240  
 aaaattgaag cggtattagg ttaagctaga agaatttacc atacgagaaa agtaaacttg 300  
 aaatttttct gattaataaa 319

<210> 3241  
 <211> 359  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-C8

<400> 3241

aggttgcggt tgacgtgggg tagtgggtcaa ccaagagtcc ttgggacaca aactatgtcc 60  
 acaacttcat aagtttgtaa agtttgagta cttgcaatga gctatctagt aggaaatacc 120  
 gaacaagatt tacaagccaa gaaaccaaca tatgaagaac tgggtggccga actatctcaa 180  
 ctcaaggcgg atttattcgc agaaagacac aaaagaaagg tagttgaaca agagttgaaa 240  
 gagttgaaac agttgtcgtt ttctaggcag actcatatcg aggcagaaga ggagtatatt 300  
 gcgaataaac tcataaaacg gctcagagag ttgagggagg aaaaggaacg cttggcggt 359

<210> 3242  
 <211> 323  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-D1

<400> 3242

ggaagaggaa agagatggtg gacaaggcaa tagccactgg acgtttcaag gaccgagtta 60  
 ttattataac tgggtgcagca ggtagttttg ggagtaactg tgccaatcga ttcgcgtcag 120  
 aaggtgcaa agtggttatc acggatattg ttgaagaagc aaagcttcaa gaacaagcaa 180  
 agaacattga aaagcagttc aacaccaagg cagttgctgt tcgttgatgt gtagaaaatt 240  
 aactcaagt agagcaggta gtgaagacgg cacaccaagc ttttggtaga atagattacc 300  
 ttttcaacaa cgctgggttat caa 323

<210> 3243  
 <211> 360  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-D11

<400> 3243

gacccacgcg taaggacaag tagcaaaatg ggcaagtctt gtaaaggctt gtttgatgaa 60  
ttggttcggt gtctgagtaa ctccgagtgt gtgaagaacc atcctgacaa aaagactgct 120  
ttgaaagact gtgcaaagag taatgggaac gatgtttcgg actattgcaa gggagtaaag 180  
gactcgtatt ataaatgtcg tcgagcagcg tttgatatga gaaaacgcat ttcagagagt 240  
cccaggggtat tagttgacaa agtagtttgt taacaaagta gttgtatatt ctcagaagag 300  
ttgcagacat tggactagga acaagtgtaa gcggctagta aatttttatt cgttatggac 360

<210> 3244

<211> 336

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-D3

<400> 3244

cacgcgtcag gtttagatttc ctgccagaca aaatgaacga cgcacaagta aaacaacaag 60  
tacagcagat ggtctctttc attaaacaag aagctgaaga aaaagcagac gaaataagag 120  
tcaaggcaga agaagagttc aacgctcgaa aactgagtca agtagaggcg gctaaaatac 180  
aaattcgctc cgagtacgaa agaaagttta aacaaatcga gtccaaacta aaagtcgcgt 240  
attctactga acttaatgcc tcaagactac aaatcctgaa acagagggaa acccttctta 300  
aggagattta tgaagttggt gaaagagaac tttcca 336

<210> 3245

<211> 318

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-D4

<400> 3245

cacgcgtcaa ccaaactggc gtcgtcgtag tacattcctt tgggcatact tgtacaacca 60  
tgaagtactt ggcagcttat tttttggcta aaatgggaag caaacaaggc agacctactg 120

cagatgatgt gaagaaaata ttgacttccg taggtatcga agtagatgaa ggtcgtctca 180  
 cgcaagtcgt ggaagctttg aacggaaaag atttgaacga gttgatcgaa caaggtttac 240  
 agaaaatgtc tacggtgcct tccggtgcc a ctgcagctgt tggagcagca gttggtggag 300  
 caactccggc agcacgag 318

<210> 3246  
 <211> 345  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-D6  
 <400> 3246

agaatcccca aacgatgctg ttgggtcagg aacctagaca aaccacttcc aacgtgggat 60  
 acttgaacaa accttcatt caagcgctaa tccacggctt aaatcgacat tattattctc 120  
 tggcagtggc ttatcgtaag aacgagctgg aggaacaaat gttgctcaat ttgcataaga 180  
 aacactggag cagaggctta aaagtgcag actttgaaga gcgagctgag aaaaatgaaa 240  
 aggcagttca gtccatgttg gacttggcaa agagttatag caaatgttg gaagaagaac 300  
 gtcaaagac aaaggaacag gctgcaattg caaatgttgg gaaag 345

<210> 3247  
 <211> 323  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-D7  
 <400> 3247

agcccacgcg tccgcccacg cgtccgcaca gtctgtgaga tggcaacgtt gctgcattct 60  
 agtcatggca aggcacaagt tcgacttgcc accgcagatg gaggaccagg tcgatacacc 120  
 gaacttttcc aagaatttgt ggtccaagtt tctcatgaaa gatgcacgga atcgtcgttt 180  
 ctccgcggt acaatttctca agtagtcaca aacgatactt agaaaaatat aatttactgg 240  
 gtagtgaaac atcacgcttg tcaactcgggt gaaaaactgg ctatggacat tggttgtatc 300  
 ttcatggcac actagacctt tgt 323

<210> 3248

<211> 323  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-D8  
  
 <400> 3248  
  
 gaatggacga taaggaacta ggcaaaagga tatggtatct gcggtagaac atatgaaaga 60  
 agcagcaccg actgttttagc aaaaacacag cactctgcag aaaagagaaa atgtaaagta 120  
 tacagtgtgc ggcttgccaa atagtagaga agaaatcgat gaaagtgaaa gcgagtaaaa 180  
 gatgaggtat agagaatggc ggtcctaacg gtaaggatcc aaaggtagcg aagtaaataag 240  
 acgtttgaaa ggcgtccagt atgaaaggag aaacgagtgat agcactgtct agtcgtccaa 300  
 ctcagcgaaa cagcaataac tgt 323

<210> 3249  
 <211> 161  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-D9  
  
 <400> 3249  
  
 cgaccacgc gtaagggcgg tctctgtcga tttgtactct cctttcgctt ttactaaag 60  
 gagaccaggc ttaggtcgca ttatacagcc cttgaaacaa tttttgtcgt ctcgtagag 120  
 acgttctcct ctacaataaa aactctatta tttttgtttt g 161

<210> 3250  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-E1  
  
 <400> 3250  
  
 gttatattat tagtcttttg gttcgttcta tacttgtgaa ggaaccatct tttgtttgta 60  
 ttgtcacgga gtttatggaa cgtggcactg tccgagactt gttattatcc aaaagtcgtt 120  
 tggaatggaa tattcgactg aattgggctt tggatactgc gacaggaatg gcatatttac 180  
 attcattgga accttgtatt attcatcgag atttgaagac gaccaatctt cttgtagatc 240

gacgctttaa tgtagaaata tgtgattttg gtctttcaag gttcatgtct aaagattctg 300  
 tgatgagtgc agttggcact gttcaagttg cagctccaga agtttgcatt cgtttggtat 360  
 taattggctt tttgtggata acattgatga aaacaggtat ttacacatga gcgctatact 420  
 ga 422

<210> 3251  
 <211> 127  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-E2  
 <400> 3251

aggctatgcg tccgcccacg cgtcggcgca cgcgtcctgc gaacgaatca tcattggcta 60  
 ggccagtcac ttgtgtgcag ttccatgtgt ctgacatgaa ctctcccaag acagactttc 120  
 gtttgag 127

<210> 3252  
 <211> 357  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-E3  
 <400> 3252

agtgaagca agccacagtg gaataacgga ggggaacatc aggagttggt ggaagaagaa 60  
 gaagacaaag aacgagggcat caagtcggaa acgacacatt ttgcacatct gaaacatttt 120  
 agtaatttga tttcccggga aggaactttt caggatctgc tgaatccggt tcgaaagtat 180  
 ctgccttgg aggaatccat tcctcttcgt ttattggaag tgaaggaaca tttgattatt 240  
 cgcacatctt ctccagacac tgcattgcgg tttcccacgt accctcatga tcgtctggaa 300  
 gttcgagtgg aacgaattcc tagcgaagaa ttggaagggt gatacaaggg atactgt 357

<210> 3253  
 <211> 215  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-E4

<400> 3253

aggccaagca tcagatggct cctccttaca gtcgttgggc ctggacaatc gttgcaaaaa 60  
ctgctctgag ttgcctccat ctctcattcc ttatcgctgc cgtagttgca gccgacgtag 120  
tttcagagga gagataggga tatactcagc atcctcagta agagcaacag tgacaactac 180  
tatcttgaca gtaggcatac tatcaaagtc cagtc 215

<210> 3254

<211> 322

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-E5

<400> 3254

ggataatgag gagagcatcg tgtagcagct ctacacaaac cattacagaa acttcaaggg 60  
ttctcaagtt agaccttacc aagaaaccag aagagaaagt tcgttggact ccagatacgc 120  
atgacaatga aagagagaac cgccgaaagt ctaaaatatg ctgtatattc cataagcgtc 180  
gaaggcccgga cgactcttcg tctagtagtg actcgagtag ttgtagcgat gtggaacaag 240  
acaacaataa taagtcgtta ccggaagaga agtgggctct tatggacaag gaaaaccaac 300  
aaagcttcct atccgaagcc ga 322

<210> 3255

<211> 315

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-F1

<400> 3255

agcccacgcg tccgcccacg cgtccggttg gtgaaatatg acaggaagag gaaaaggtgg 60  
taaaggtctt ggaaaaggag gagccaaacg tcctcctaaa gtacttcgag ataattattca 120  
aggtattacg aaacctgcta ttcgacgttt ggcaagacgt ggtggtgtaa agcgtatatc 180  
tggccttatc tatgaggaga caaggaacgt gttgagagtg tttctggaaa gtgttattcg 240  
tgacgcagta acttacacgg agcacgctcg tagagagact gtcactgcaa tggacgtggg 300  
ttatgctttg aaacg 315



<210> 3256  
 <211> 358  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-F10  
  
 <400> 3256  
  
 gaccaacgcg tacggtacga caaagccaag tgaggaaccg aatgcaggta cagggcggcc 60  
 cgatagacag ttgtgaaaga gtgggagaac atgagcgcac agaagaatgt acgaaatggt 120  
 tagagtaatg gccatagtgg aagtcatagc gggaatctga gaggaagaca gccacgttgg 180  
 aactgagaaa aggtccaaac aagagacgtc agcagtgggg aaaattgggc agtggtacag 240  
 ggaagtatga cccaatattg aagactggag taaacagtag aggaagtaaa aggagggaat 300  
 gaagggaagt tatggcagaa acacgtgccg gcagcagcgg taaaacctgt gtagcaag 358

<210> 3257  
 <211> 385  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-F11  
  
 <400> 3257  
  
 cgtcgcgaacc cgtcttagtg ctttgcgact tccaaaatga tattatgggt ttcgttcccc 60  
 ctgagaagaa ggaagccgtc attaaaggag cttcgaaact tttgaacttt gcccgtaga 120  
 agaagatccc tgtagttcat gtgggagtag gttttagacc gggacaccct gaagtttcga 180  
 aacgaaacaa gatgttttct cttgtttcct ccagaggccc ccatccttgt ggaaggtact 240  
 cctggaagtg accacgtagc agagttgaaa ccaattgaag gtgaattcag tgttacaaaa 300  
 agaagagttg gagcacatta taataccgat cttacaacca ttcttagcgc tttgggcgct 360  
 acccacctga ttttggaag tgttt 385

<210> 3258  
 <211> 327  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-F2

<400> 3258

ctcagatact actatccgac cacaggatga cgaagtagtt gcaatgataa aagagttggt 60

ggagacaaga attaagcctg cagttgcaga ggatggagga aatatattgt atagaggatt 120

tcatccagat acgggtattg tcgatttga gttgcaaggc tcttgtacta cttgtagttc 180

gagtgtagta acgttgaaaa gcggagtaga gaatatgctt atgcactata ttccagaagt 240

caagggtgtg agagaagttg taagtgaaga gagagaaagg atggaacgag taagtagaga 300

gcagctgcaa agtttggaaac aaagact 327

<210> 3259

<211> 328

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-F3

<400> 3259

agccccacgcg tccggtgaaa gtgacagcga cgagagttgt gccagtgacg acaagacgat 60

gaaaccttgc accaagagac ttgcttctag aacaaaagtg atgaagtgtt cgaattgcgg 120

ttcccatact ttgtttcctg tggacgatga agaagagtgg agcaatggcg cgctgcagga 180

ttcgacggat agcgatatta gtacttatat gcctctcaag ttttggaga tactgaatag 240

tggtgaaggt cgagatagcg agaaattgtt taggtttaaa cgaactcaag gaaattgtgt 300

cggaggcact gtccaataag actcgcca 328

<210> 3260

<211> 333

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-064-Q1-E1-F4

<400> 3260

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cgtctgtttc agtggatagt ttttcttga ggttctttt atggtggttg ggtgcttttag 120

tctgagcata agaattagtc actttatgcg gccaaaggaag aagcttttat tgctcaagaa 180

aggaacaaag aaaggcccat gagtgaagaa tactggagag aattgcaaga aataaaacct 240

agaaatttgg aacagttgta caagatgaag caagaagacg ctgcaaatag atcagaaaaa 300  
tatcaaaggt ggaaggaaaa cctacttggt tta 333

<210> 3261  
<211> 324  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-064-Q1-E1-F5  
<400> 3261

agcgcatttt tacgcattgt tggttgaaac gatatggcag agaagttgac agagatcaag 60  
gataaagttg ccgataaaat aagtgaaatg actggaaaca agtcatctca ggaccaggcg 120  
aaggataaag ctagcgaggc aggggaccgt atgaaggatg caggaagtgc tatgaaggaa 180  
agtgtcaaaa atgcagggga cgccgtcaag gataagatgt ccagcatgaa ggagtctgtt 240  
tccaacaaat cggaaggtgt gaaagaaggt ctgcaaaagt agatactccg aggttatctc 300  
atttgtttcg tcttgtttgt gttt 324

<210> 3262  
<211> 345  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-064-Q1-E1-F6  
<400> 3262

acgcggacgc gtgggtttgt gggtgctgtt ggtgatcgac acgaaagata ttatcgtgaa 60  
ccaaattcat ttatatatca ttggagaatg actcccaaaa aggaaacacc gcatactccc 120  
aaaggaggct atgcaaaagc tgtacttgat agcattgttg ctctgaagga gaggaatggg 180  
tcctctccac aggccatcat aaaatatgtc aaggctcaca atccgcagct tccggaagac 240  
aaacttaaac ttcaactaaa gttagctttg cgtcgtttgt taaagcagaa gcttattgag 300  
aaggtgaaag cttcgtataa gattgctagc aagagtagta gagtt 345

<210> 3263  
<211> 320  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-F7

<400> 3263

gttggttcga cgaccacagt gtgcagttgg cagtcgatat atttcgagta gacagaaccg 60  
tgtgagtatt ttgaccaggc ggaagaggga aaacttgggg aggtatagac acctggggac 120  
aacgactggt tgtttgtctg acgtgccaaa gaataatggt ggttatgaag gagatggttc 180  
agagtctagg gagaatgtat cacaaaaaag ggatagaagg aaaatagcgt caagtgaaga 240  
agaattggca gctctacaga ctttgtcttt agagggcttg ttgagttatt acgagggaac 300  
tcccatgttt tcggaggaag 320

<210> 3264

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-F8

<400> 3264

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gttggaact gggttaacag caatacagga agaattggaa tgggaaaaaa acattgcata 120  
gctaaaggta tcctctctct ctctctctct cataggacga gtgatatgag aatatataca 180  
atatatatat ttgttggtag aaatgttcaa cttgatgttt ttctcgcaa tagagaacaa 240  
caaacaaggg gcacaaacaa ggtttccatt gcaagatgtg tttgcagtat ttgtctctcg 300  
cgggtgaaat gattagttgt tgctgtcttc tcttctatg atttgagagt gatgatgatg 360  
attgttacgt gttgttgttt ggtgaaggag taataaatgt agcttttgtg atttgcattg 420  
atg 423

<210> 3265

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-G10

<400> 3265

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tttaatggaa tctgatggaa tagagccgga tagagttact tataacacct tgataaaggc 120  
 atatggctac atgcgtcggc atgatctcgc agaagctacc ttttaagcaac agatttccaa 180  
 gtttggaccg cagttggttg gctttaatac cctaataaat ggatactgtg aagactaaaa 240  
 agtttgctcg tgtcttggaa ctatttgcgc aactcaagga attgggtttg aaaccagatg 300  
 ttaaaacgta ttctactatt atcaatggac aaatattgtc tggtgagaat tcatctacag 360  
 tcatgtgttg gtatcgacag atga 384

<210> 3266  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-G12  
 <400> 3266

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 ctggcagaaa cagtttcgaa tgatccatt tcgggtaaag tgacacaaag gagatttacc 120  
 atcgtggaag gaatatcaag caagtttgcg gatgtgacac ctttggataa agttgtggaa 180  
 ttgaagaatc agtaacgttt tcgattgaat gtgggacaaa gttattcggtt ggggtggcac 240  
 aaggaaaaca ggtcgtggaa ccttagaaca ttttggattt ggaaacaaag atgcagatat 300  
 tgttttggca gatctgggaa atgctattgc aactgtgggt ggattctgct gtagtagtga 360  
 agaagtagcc aatcatcaac 380

<210> 3267  
 <211> 362  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-G3  
 <400> 3267

agccacgcg tccgcgagga gagagagaga gacagacaga tggccaacgc tggtaagat 60  
 ggccttgtgc aagtcaaaa acatagaaaa gtaaacagat tgcaagaaga taatattttg 120  
 aatagagcac tatcacaacc aggaggtaaa gtacagaaaa ctatccagtt atccattcat 180  
 agagtctatt agatgtattt ctgtgctttt gcaacatcca gttgttggtg aatgcagaaa 240

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gagctattat aggaaatatg tacgtgtcca gaaagtatcg aagtgtgtcg tctattagct 300  
 ggacatatag cagtttggtt cgatgaacat ttgggtgact ttcggttggg agcgatcttg 360  
 gg 362

<210> 3268  
 <211> 367  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-G4  
 <400> 3268

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 gaacttgat ctggaacgaa ttatctaaat gtgatataat atccagggaa gatcctcttt 180  
 ttggttccgt ggactcacgc gcagtacagt actggtttga acaagcttgg aaccaagaca 240  
 agagtcaact tttagaatct gtcaacaaac acttgtctaa taagacttag ttggttggag 300  
 aacgacttac tattgccgat atagcagtgt aactggcct ctattccact gtccaacaaa 360  
 tggtgtc 367

<210> 3269  
 <211> 316  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-064-Q1-E1-G5  
 <400> 3269

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 aactgagtat cacgaagaaa agaggagtc gatgacgaaa gaaagatcaa ggaagtaaga 120  
 gtacgagaag gagtactgtg aatgaaagca ggaaagtatt tgaagaagag agtgtaaagc 180  
 gcgtaccttg tgcacaatgt cccagcgagt gaaagacgaa gcaaacagac agaataagaa 240  
 gtagccaggt aagacccgaa gctagtgtgat cttatgccgt ccaagcgaag taacgctgaa 300  
 ccagtatctg tggaaa 316

<210> 3270  
 <211> 379  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-064-Q1-E1-G9

<400> 3270  
  
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 ctgtagttca cgattgatac tgctgttttg tttggtcttt ataacgacta taactttggt 120  
 aaatgcaaaa cgaaactatt ataaagtgct gggcgtggaa aagaacgctt ccgagagtat 180  
 gtggtttagc gttcattctc caagtttctt tgacttttgn ttaggagaaa ttaagcgcgc 240  
 gtaccatcaa ctagcaagga agtatcacc ggacaagaac ggcggtgaca agaaggcgga 300  
 actgaaattt cgagaaatag ctgaagcata tgaagtccta tcagaccac aaaaaagaga 360  
 aacgtacgac ttgtatggc 379

<210> 3271  
 <211> 328  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-H1

<400> 3271  
  
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 tgcggtatac atataaagtg ggagcaagtg tttgaccag ggaccatgaa aattgacgga 120  
 aaattcgcca acgtttggtt ggaaggtttg cccaatctct tcgctgagtg ttcgagaatt 180  
 gaagtttcgg agctccttgg agaaagagtc aaggtcggaa acgaagaatt ttttacatgg 240  
 gccgaatcac tgagggccgc ctcttcaatt ttgtatccca agaattttgc tgaagacttt 300  
 cctttgaagc gttccggcaa tgaaattt 328

<210> 3272  
 <211> 349  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-064-Q1-E1-H11

<400> 3272

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caactactct gagagaagtt tctatcttaa gagcactttc agattgtccc taaaatcgta 180  
aaactatctg acgttcttca cactgcatcc agaaatggta aacctgtatt gtacttggtgta 240  
cttgaatact tgggacacga tctcaagcac tatatgattt cgaagaacgg cagaggagta 300  
tgactcgata agaaacaagc tctggtgtgt ttgctgaaaa taaattttc 349

<210> 3273

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-H12

<400> 3273

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ggaggaggaa gacgatgagg aagaagaaga tttaccccag tctaagagaa agcgatctaa 120  
agactcaaaa aaggaagtgt ccaaagcatc agcaaaaggt catggaggcg gaggtcttcg 180  
tgctgcagcc aacaaaagac gtctgttctgg tgaagagtcg agtgatgatg atgatgatga 240  
aatgagcgaa tccttgaaag aactcgact gtctgattaa agggcacacc gcaatcttac 300  
aaaagttgtg taaggaaaaa gagcagtgcg gccaatatga atttgttttc agcttctttt 360  
atatataaaa gcattggctc gca 383

<210> 3274

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-064-Q1-E1-H2

<400> 3274

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tccgttttga agcttgattt agttgcgtcg ctttgtttgc cactttgtag taaataaaga 120  
aaagactcag gagatatctt tgataaagta tggggaacag ttcctcttct agtgcggtggg 180



accttgcac gaatggcaca ctgggacccat attacatgaa ccacagtgtt cccaggagtg 240  
accgtttgct ctatatgacg aatatgtttt cgcgctcttc aagtaataga agaccgcgaa 300  
acagcagggc cagaagcaga catagtactg aagaaccagg gataattcca actcaatttt 360  
atctggatga gagcacgttt ctaaacttga tacagaatag aatagttgc 409

<210> 3275  
<211> 348  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-064-Q1-E1-H4  
<400> 3275

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cagtacagta gcagttgatg atttgaagcc ttggaagaga gaagacgacg atgatccaac 120  
tttatcagaa ataggtcaaa agaatttgca gcagcagcaa cagaatgctg taaataatat 180  
gaataataga aaggataaca agaacaagac agtagatatg accaaagagt tttttagggg 240  
gcctccaaga cgtggaagag gaggaatatg tcgcggtatt ggggggaata ggagaagagg 300  
aagaggaaaa accggtcctc caaatacttc caataataac tatcgacg 348

<210> 3276  
<211> 139  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-064-Q1-E1-H6  
<400> 3276

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tcgcactttg tagtagatac cgaggcgagc cacgagtata tctttgagaa agtatgggga 120  
acagttcctc ttctactgc 139

<210> 3277  
<211> 398  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-064-Q1-E1-H9

<400> 3277  
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tttggcacgt aactttttcca atgtctgtct ctcgaggagt ggtctgagag ggggatgttt 120  
acgaaatgtg aaagttttca accacaaacg acctgcaagg ttgttatcta cgaaaatgag 180  
aggaggcgac catgaaagga gagaacttag tcgtcctatg cgtacgcttg atttaccgct 240  
ttcgacgaac ttttagcttt tgcgcaggat ccctgggtcca tgtttcgctc tccatggagt 300  
ctgtcgccca gaagtatggc agtagacacg tggatgcctc gtgttgactt ggtggagaag 360  
gaagatggct tttatgcata cgtggaacta ccaggact 398

<210> 3278  
<211> 269  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-065-Q1-E1-A1

<400> 3278  
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gatagtgaca tagactcgga gtggagtgcac ttggaagata atgagaccag ttgtcccgag 120  
caagttggtg cggttgctgg ttcttctgtc gtgaaaagcg gcatttttgt gtagagagtg 180  
tgtacagagg tttcatacca gccgtgttca attgtggtgt gttggtgtac ataaccatct 240  
acgttttggg gctgtgttgg gcctacttt 269

<210> 3279  
<211> 378  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-065-Q1-E1-A10

<400> 3279  
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cgctttgtca tcttcttctt cctccaaaga aacgcatatc cttgtagaaa caaatccttc 120  
tcaaacagag tggagaatat ggaaagctca aaagaaactc ctagtagcct ccattctttg 180  
tgcgttgttt atgtttgctg aaatattggg aggatacttg gccggttctt tagctattat 240

gacggatgct gcacatttac tttccgactt tgcaagtttt gttatatctc tggttgcctt 300  
acaccttgcg aaacgtcctg gaagtactac tatgagcttt ggttatgctc gagctgaagt 360  
tattggtgca tttgtgag 378

<210> 3280  
<211> 313  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-065-Q1-E1-A11  
<400> 3280

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gtacattcaa catcatcaaa tgccaaaggg aggaaagaaa gattcttcaa agaaagaagc 120  
cacaagtaaa cctgcagcag cagatgctac aaagacgaca gaaaagtctg gtccggaagc 180  
caagttgaag ggaactggtg caaagaaaca ataaaaagtt gactatgcat gttcctgtta 240  
tgttttgtga gttctgtttg atagtttcca gctattcttt tggtagtgaa taaagagaaa 300  
attttttata ttt 313

<210> 3281  
<211> 370  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-065-Q1-E1-A12  
<400> 3281

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accattttta tgaagaagaa gaagatgaac aagctgaaag agctagaagt agtcttcgac 120  
gttctttctc acctattgac gattctgaca attttaactc gtcggaagat attattccag 180  
aagatgatcc acgtatgaca gatgaaattg gtgaagaaag ggatcgaatg tttgatgatg 240  
ccgacaaaaga aaatactctt ctttctaattg acatgatgaa tcttgtcaag gacgcaattg 300  
acaaggcaac ttcagaaaag atgagtgaac aatgttcctt tcgagaagtt atgaatgtgt 360  
tggaacaaaca 370

<210> 3282

<211> 111  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-A3  
 <400> 3282  
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 tgaaaggacg atcatctacg agaaacccga cttactccaa catcgttcat t 111

<210> 3283  
 <211> 324  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-A4  
 <400> 3283  
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 gtgtcatcaa gtacaactgg aaagccctgt cttgtattgg aaagcagcaa caacaaccaa 120  
 cacaagcctt ttctagtgtg caaaaatttc aggaagagtg gttaaagttt ctagtatgtc 180  
 ctgtttccaa acaaactttg tactatgact cggaacgcga tgaattattc aaccaatcga 240  
 taagatatcc agtaagtaca agtcatataa aatgctttat tttctatcat tgaaaaacaa 300  
 gtatctcctc cttgaagcaa acaa 324

<210> 3284  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-065-Q1-E1-A6  
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 aaagaacaga aacaactgaa gagtcgacgt cagtcccgac ggaaccttgt atgggagagt 120  
 tgcagcaact tctttcagtg acacttgaaa gaagccattt ggacataagg aagcttcaac 180  
 aagcagcgaa cgattttcgt ttatgcgcaa agacgtttta aatatgtgat gtgaagttgg 240  
 aacaaagttt tctcaaaaag tcaagtgatt agacaccctc atgggtttttc attgaaataa 300

ctggttgctc ttccttgagg caacctatatt attacgaaaa ttcctgtcac cttctcttac 360  
aatatgaggg ttccttctgg atatggtgag ttttcattga nagttttgtt gggtgcc 417

<210> 3285  
<211> 213  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-A7

<400> 3285

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ggttcaattc attggtccgt cgctttacaa ggtcggccct gttcaaaggc ggccgttact 180  
tacctttcac ggccgggagcgt ttacccccct ttc 213

<210> 3286  
<211> 391  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-A9

<400> 3286

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taagagcagt gacgaaggag tgaatttggg tccacttgca gtaacaagtg gccacgaaac 120  
gagagatttg aagggaacta cgtctgcaag ggcccgaaga atgagtatgg aagagagaaa 180  
tcttgttctt ttaaagagga agctaagaaa cagagcgtct gctgttcggt ccagaaaacg 240  
ccgcttggaataaattgaga cgcttgtaaa tcaagtgate gaactatctc acttggtctc 300  
acgactggag gacgacttc gagtgtaga gagacatgga cttactactt tgcaagacag 360  
ttgcgtgaac ctatcgaata agaaaacctt a 391

<210> 3287  
<211> 386  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-B1

<400> 3287

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cttctacaag tcacaaaaag gttctttcca cgggtgcaga agaattcggc ttctgtaagt 180

gcaaggggtgc ttatttccat ggatataaaa gataaataac ttatgcaaat aacgcctac 240

tattttacaa gactgaaaat cgtggtagcg ggtatcgact gactaagggt tgatacacga 300

ctattgggct tgcgtaacgt ttgctgagct tcacaaaaat cgactagttc catactactg 360

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<210> 3288

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-065-Q1-E1-B11

<400> 3288

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agcagagatg catagaatgg gacaaaaaga cagaaaagct ttcaggagga gtgaaacaag 180

aatatttgct gtttttggtg ccttttgtgt atcagcggtt tctcgtgtgt ttgtttactt 240

ggaacgctct gttgattgaa tgttttcatt ctaatttctt tgtagtcgaa accattcgag 300

ggtttggtac actgactggt ggtgccccctg ttttagctct tgccgctagt ctttcgtttg 360

cgcattatta tcgacgcana agtatgccga tttttgcaaa 400

<210> 3289

<211> 397

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-065-Q1-E1-B4

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aaacattccc agactctgaa attcgcatTT ttccaagtaa agccctgtcc atgactgcgg 120  
 tctttctctt tctctctctt tcgagagatg ttgcagaaat actccaactg aaatgttttc 180  
 aaaggcgggtg catgttttca ccaacgtttt cccatttgga gcttccaagc ccgccatttc 240  
 ttctacgcac ccttttctta cccatttttg tgtctcttac tcaccaaggc atggcggggtt 300  
 tagaagactt ttatgacccg acttggtgtg cagaatatca naatatagtg ccagaaaaaa 360  
 aggaacctgt agaaaacaaa ccagattcta ctcgaaa 397

<210> 3290  
 <211> 401  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-B6  
 <400> 3290

cccacgcgtc cgcccacgcg tccggcctgg ttgaagagta ttactcgatt acctattctt 60  
 gtgaaaggag ttgttactag agcggatgca gaaattgcag ttcgtaatgg agtagctggg 120  
 attattgtga gcaatcatgg agcaagacag ttggatactt ctcttgccac tattgattgt 180  
 ttggaagaag tagttgcagg tgcacaaggc aaagttcctg tgtttgtaga ctctggagta 240  
 cgtcgtggta cagatatagt gaaaagtttg gcacttggtg ctcaagctgt acaaattggg 300  
 cgtggtgtct tgtgggggtt agcagttggg ggggaagaac gtgtggatct agtgttgaag 360  
 ttgcttcgtg atgagtctga gttgggactg ggaacttggt g 401

<210> 3291  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-065-Q1-E1-B8  
 <400> 3291

cggacgcgtc cgcccacgcg tccgcccacg cgtccgcgga cgcgtgggca ataactgacg 60  
 aaaagaagaa tgttgcgttg gtggagaagg agcgaactgac tgctgacgaa agaattattg 120  
 acattgtgcg tgactaggaa aacattatgg aaagtgctag tcaattgtat ccagaaaatc 180

ctaagaaaaa tatttctctg gttggcactc caggaacagg aaagacaact cttgcaaaga 240  
gaattgctgc tgtcacttcc ttgacacact tggaagttgg aaagtttgct gaagagcaca 300  
actgtttggg ctgttacgac gagcagttag attgcttcga aatagaggag gagaaactta 360  
ttcctttgct ggtaaacgct ctganacctg gaggctttct tgtggagtat catgga 416

<210> 3292  
<211> 190  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-C1

<400> 3292

ctgcatcaga caccgagcgg tggtgggtgt tgtttggtga gacaacacac ttgacataac 60  
actgtataat aatgtatgtg tttgtagcag tcagcgtgtt gataacgac aactattctt 120  
tgcatatgtt tcaacatgtg ctgcaaaatg ccgtaattaa gatcaccgga tcaacgaacc 180  
cccctatggc 190

<210> 3293  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-C10

<400> 3293

ggtcaggaat aacgggtcgg ccacgcgtca gcggacgcgt gggcgagaac gatgcttatt 60  
ttatggtaga tatggcacat atttcaggtt tagttgcagc aaaacaagtt ttatcgccgt 120  
tttcttatgc ggatgtggtt acaacgacaa cacataagag tttacgtgga ccaagagcag 180  
gtatgatatt ctatcgacgt caatgtcttg cacaagttag acgaggagaa gatttggagt 240  
cgttgattaa ttctgcagta cttctgctt tacaaggagg acctcataat catcagattg 300  
cagcacttgc agttcaactt gcacaagtaa atacacctga attcagagaa tatgcgaaac 360  
agatcatatt aaatgccaca gctttggcga agtacttgag ttcgttgggt 410

<210> 3294  
<211> 380  
<212> DNA



<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-C11

<400> 3294

agcccacgcg tccgagcata tgaactgggt tgcaatttat ttgataacgc tgaaacttat 60  
gcagctggag cagcagagtc tatcatgggg gaggcttttc atcgaggtgt aaaggagggc 120  
gtatggacaa gagaagactt ggtgttgact acgaaaatat tcttcggcgg aagaggttca 180  
cgggactgca agcctcgttg aagcgtatgc agttggatca tgtagatgtt gtgttttgcc 240  
atcgcccaga tccacttacg cccatcgaag aacagttcg tgcaatgaat cacgttattg 300  
accgagggta tgctttttac tggggaacta gtgagtggtc tgcacaagaa attacagaag 360  
cttgtcgagt tgccgatgtc 380

<210> 3295

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-C6

<400> 3295

agtttggacg aattattgcg caatcgatac gtcctaaatg tcacgagggg ttgggctgta 60  
ctcaattatg acgaggtcca ggtaactcac tcactgacg gagtccctag agatatcata 120  
gaaagtgaaa tagtacgtat tccagccgct caaaggcctg cagatctttt ctttttgaga 180  
gaaaattcgt tgttcaagtt ttggcatcgt gagttgatgt ctcaagttat tcatcatgca 240  
cagaaacgtc gtcgcctcat catggccgag catacgaaag ataccgcgaa acaaccattt 300  
tgctcgtgta tgtagtagtt ttgctttgtt ttgtgtagta gttagttgtg tttcagcgga 360  
aagggcacgt tttcttctca ttatggacat gagaacatag atgtttttgt 409

<210> 3296

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-C8

<400> 3296

cccacgcgtc cgcccacgcg tccgagtaag tgcgcttggc agcaaactaa aagatggcaa 60  
gaagaatcat cggagcttat atgtctgacg ctactgtagc gtctctatctt agcgtgaaaa 120  
tgttgttcta ccttacaata cttgcgttct ctatcactat tgtgggtctt atgggtaaga 180  
gttccgacgg tatttgggtt cacagtgttc cagcgaaaga cgaatattgt gcatacaagt 240  
cttcccttca agtaaaccac cacggcatag cttcctattg caagtatatc atggctgtag 300  
cagctattgg tttggttata agcttcttcg agttttggta tgcattcctc ggaattttct 360  
tcaagtggca acaaaagtgt tggatatattg aatctgctat caacgtgttt t 411

<210> 3297  
<211> 375  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-065-Q1-E1-D12  
<400> 3297

ageggacgcg tgggtctcga agcaaaaagc cttgaattgc ttctcttttc tcgaggttaa 60  
tatacagttg ttgagtaaatt ttaccgttgt gtcttatgat ttccacatta cgctgtagtt 120  
ttattaaagt tattgtcaag agattatgaa gctcaatgac gaaaaaaaaa atagtttgtt 180  
gacacgtttt ctccgagcga attttttttt gaggtaggat tacaagttga agtagttgtg 240  
gttgtctcaa gcttttgccg gtttcttggg atagaaaaac cgtccattct tatcttgttt 300  
cctagaaaaa gggtcacagc gttgtgagta tcattttcaa gcgacgcatt gttgttttgg 360  
aaccaaaagt tattg 375

<210> 3298  
<211> 289  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-065-Q1-E1-D5  
<400> 3298

acgcaacgcg tccgcccacg cgtccgatta cgtggacgtg gcagcaacat attttacggc 60  
aatatgaatc aactaagcca agtgggtctca cacgtaggta ccgtgcagaa gaaacccaag 120  
aatatcata caacacatgg atgatctttc caacctgacg aaaatgggtgg atgtcatagc 180

taatgtatgg ccaatcagct atttcgagtt acacctaagt tctggacgca tcaatgacaa 240  
 tgctcaatgt cgcatattag attcctggaa ttaggcatca cttctaatt 289

<210> 3299  
 <211> 383  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-D6  
 <400> 3299

aggggcaacc aactaccacc aaaagtagca actgcaagga agaacagagt gtcctaaaga 60  
 atagcaagtt gtgatgagga gaattggtag caaactcttg tcttattccg gcaatgaagt 120  
 aaaacttcgg gatgttgttt cttctctaag ggagacgagt aaagcgacgg ggtcttccat 180  
 ccggagttgg cttcgtgata tcaaccagtg gtatgaagac acttactata aaaagggaaa 240  
 ggtggatcct ttggtacatt atatgttact ttgttttgga gtgggatata ccatcaatta 300  
 ctcccatatc aaacataaag tggagcataa gaatgacgat atcgaaagct tgtaaacgtc 360  
 acctttgttg tgttgttggg gat 383

<210> 3300  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-D7  
 <400> 3300

agcatgttcc ctttcagctg agtgtactgc attccataga gcaactccac tttgcaaagt 60  
 cttcgagtcg tcctcttccg tttcagactt tgcattcgtc ccgtcctggt gcaatctttc 120  
 gcgaaccatc gataatatag aatcccgggt tcgtttctct aacttttcca acttcttttc 180  
 caccttcttc ttcaaatacca agttactcac ttgcggtata aggagactct aaaaaacgag 240  
 attagatatg aacgacgaac gataacctat acttaacgaca ttttcttttc ttttcttttc 300  
 aaattccttg atttcttctt ggaaaatctc gttttgctct ttagtcactt tcgttactat 360  
 ttcttcaggg tcgacaaaact ttcgtaaaac taag 394

<210> 3301

<211> 361  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-065-Q1-E1-D8

<400> 3301

gaaagtactt tggtaagaga ttgcaatagg tcttgcgacc agataagtaa gcgtgtgtgc 60  
 atgagtgaag agacatccga gcacgaagag aatgtaggta aataggatag gactcgaaat 120  
 cacagtgtaa cgagagtann aggacgcaga gatctagaaa gagagaatgc ctgaggtgtg 180  
 agtactcgag aacaagggtcc aggggaagtag aaggtaacaa tgaggaaaag tttacaatat 240  
 aaagggatat atggaacaga gtgtaaggct gcgtcatact agaaatccga taggagtaga 300  
 gaatgagaga aagttgtggg aaaagaacat aacagcagta ctgaggaccg actcaggtac 360  
 t 361

<210> 3302  
 <211> 197  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-D9

<400> 3302

cacgcgtcag cccacgcgtc cgcggaacgcg tgggctcatg ggaagggtgc atggcacctt 60  
 caatttggtg gtttgaaaat aactacgaaa tagtattcag cgcaagtttt tacgatacaa 120  
 gaataaacat tatgtgttat acttaaaaaa aaaaaaaaaa aaaaaaagaa aaaaaaaaaa 180  
 tgacgataac acaaaaaa 197

<210> 3303  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-065-Q1-E1-E12

<400> 3303

agggtaaaca tgtggaaaag agcaactgtc ccaacactag gaagaatata ttaccctaag 60

cggttggttag aaacttttgc caagaaagaa acaaccaagt tgccagttgt tcacaacttt 120  
 gtgggaggaa aatttgtggc aagtcagggc cctattagcc agacagtgc caatcctgcc 180  
 actggagaaa gccttcaaag cgtaccttcc actaccaaac aagaagtgga ccatgtagtg 240  
 caagtagccc aagaagcggt tgaaagctgg tccaaaatgc ctatgggaag gcgtttgaat 300  
 tacatttttc agttgcgata gggagtcang aaaagatccg cggaaattgc ccaag 355

<210> 3304  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-E6

<400> 3304

ggagaaaaag acgaagactg ttggtggctc gatgagtaca acatttcttt gtccattcct 60  
 acccaaactc aactattgga aaccactttg taataaaagt aagtatggga gaatgacagt 120  
 ggacaaggaa aggaaagaac ctacctctc ctaccagca gagtgggaac agcatcgat 180  
 cgtccagtc aacttgtttc gtcaacaagt agaaaccttt ttgcgctcta ttcaaagga 240  
 tgtgcaaaa agaattggaac gaattgcgga agccttgta ttacaacctc aagacacgtt 300  
 gatagatgtg ggttggtgaa caggagccat ggtacctttt attcacaagt atattccttt 360  
 atctcacatt tggttggtg actgcagtga agccatgtca gaacaagcca agaaaagg 419

<210> 3305  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-E7

<400> 3305

acggatggaa actctggaac agactcctag tcttcaagca gcaaacagga tcaaccaact 60  
 gctagaaact caaacaacaaa cgatagaaaa acaaaagaaa aagatacaat atgaagtttg 120  
 gaacgggtgct gagtggacca acaacagcaa tctagaaaaa atagcatgcg tcttgacaga 180  
 gtgtgaaact cttttgaaag atatgcaagc gtttcgtcga tgtatttatt cacaaattca 240  
 aaaccaccag acggaaacat gtttcattcc tacacagttt ttcgaagctt ggtctgcttt 300

gatgaaggaa ttggaggaat gtcactctgcc gcctttgctc gaacatttgg tgacgtatga 360  
catgtccaaa caaccattcg atgaaactct acagagactc gaacgttgtg tatect 416

<210> 3306  
<211> 408  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-F1

<400> 3306

agaattgctt cagcttgaag atgaactcca aactacccc taatccaatg gaaatagagt 60  
cactagagac taaccaagaa agagaaacca acgccccaga agtatgggaa gaagaagaag 120  
aggatgaggc aaccaagaaa gatgatgggt cgacaagggt tctcaaggta tttgcggtca 180  
tagctgggtg gggctccact ttcttcggag tagatacttc agttattgga ggtgcagctc 240  
tgtatgttca acctgacttg agcatttctc ctttgcagtg gtcattgatt acttctgttc 300  
cacttttggc agcatgcttt ggtttaggaa cctccatacc cctttgttac cacattggga 360  
gaaagtatgt tgtcctttta gctgctgttc tatatcgggc tgggtgcta 408

<210> 3307  
<211> 205  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-F10

<400> 3307

catcccgctg ggacatttgg cgttttctag cgacgctggc tatctattct tcggtgcaca 60  
ctacattcac caagtacctt ccatagacca tctcactggg gtgggtttac tgggtacattg 120  
tgtacttggt ggtagtgtg tgccctttgt ggttgtcacc ctatggttga ctccacgcac 180  
ggtcateccac attcgtcaac atgtg 205

<210> 3308  
<211> 415  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-F3

<400> 3308

agcaagcgta gagcagaaga actgggtgta aaggtcgagt agtagagtaa gtgtaaaagg 60

gaaaggaaag gagagaaaga ggaaagggat gaaatgcaga gatctctaga gaaaggcaag 120

aaagaaaaga aaggaagaca cagtaaatga ggcgagaaag cataggaagt gaaacggatt 180

aggaacccgt gtagtctatg cagtaaaaga aagaatgagt aagaaaaaag ggagtcattc 240

caccagggga gtaaaggcgc aagaaagaaa ccaaagcaa ttgacgggaa tcggaaaaag 300

gggtggatca cgtaaattaa tccgatataa accgagaacc ttacctctcc aagaaggtgt 360

tgcacggctg tcgaaagaac gtgctgtgaa gtgagagaac gtacgagaaa gccaa 415

<210> 3309

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-065-Q1-E1-F7

<400> 3309

aggtccaaac aagagaagtc agcagtgggg aaaattgggc aatgtacaag gaagtatgac 60

ccagtaatga ngagtggagt aaacagaaaa ggaagtaaaa ggagggaatg aanggaagtt 120

atggcaaaaa cacgtgccag cagcagcggg aaaacgtgtg tagcaagcgt agagcagaag 180

aactgggtgt aaaggctcgag tagtagagta agtgtaaaag ggaaaggaaa ggagagaaaag 240

aggaaaggga tgaaatgcag agatctctag agaaaggcaa gaaagaaaag aaaggaagac 300

acagtaaatg aggcgagaaa gcatangaag tgaaacggat taagaacccg tgtagtctat 360

gcagtaaaag aaagaatgag taagaaaaaa gggagtcatt ccacca 406

<210> 3310

<211> 336

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-F8

<400> 3310

cttagaagca gcaaaccaga gaggaaagcg ttaaagcatg aaagaaaaga aatccgaaaa 60

agaagagaaa aaggtaagaa agaggaccga atcagggttaa gaggtagagg agcaagaaga 120

gaagagagaa tgctgggtgg agtagcgaaa caagagaagg gaagtaaaag gtaagaaaga 180  
 ggaaagggttt acgagagaag gaagtagaaa gaagagagtg taaggcggcg tcataataga 240  
 aatccgaaag gagtagaaga aaagagagag aagaaagaaa agaagagaaa agccgtactg 300  
 aagaccgaca caggtactcg aggagaaagg agaccc 336

<210> 3311  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-G12  
 <400> 3311

gggtcggcca cgcgtcagac cattgtcata tatgaatgat caaagtttct taactggacc 60  
 acttccaaaa gatattcata gtattgccta ttctcgtctc attttacagc gcttggaagt 120  
 gaaactgggtt gctaatttgg caaaggaaat cgaaaagcgt agtaaacaag gcaaattcctc 180  
 gtttgaagtt tggaacgaat gtttagactt ggctgccgaa gttggaagag cacatacgga 240  
 gttgctaata gcagaacttt cggaacagtt gatacaacga gctagtgtta ccgattcttc 300  
 tgtcggaaac attttgaaac agtgtcaaac gctgtttctt ttacatttga ttgacaaaca 360  
 gtcgattttc ttgcgttata attgcttata tcct 394

<210> 3312  
 <211> 79  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-G2  
 <400> 3312

gtgggtgttg tagtgctcca aggagtcaag taactcgtgt ccaagttacc aatttggcac 60  
 tcggtgttac caggaagga 79

<210> 3313  
 <211> 375  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-065-Q1-E1-G8



<400> 3313  
 agggctcaag gggaaagcgt ctctgtggaa caactgttgt aacacttcac cgagcagttt 60  
 tcgttacgtt ctctgtcgta tagcatgctt tttggagctg taatataacc aaagaacatg 120  
 gcttgtgtag cagacgagcc ggcaggttgg acaccgagca ccgaagcagc gcaaactcca 180  
 gtggacaacg actgtcttgc cccttcttcc caccctctt caccttcctt gcaagtttgt 240  
 actataagat tcttactatt ggacagtaac gactttcgta ttgccttccc accggaaacc 300  
 actatattgc agttgaaaca aagagttctg gaagaccaac cacaagcttt tttgaacttt 360  
 ttagaacaca acaga 375

<210> 3314  
 <211> 361  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-G9

<400> 3314  
 agcccaagcg tccgtgacga cgcaatacaa atctatcaag aacagccttt tggaaagact 60  
 gaaacacttg aaagcacaaa agaacaattg cttccgtctc gagatatagc gtgtagtgat 120  
 tcagaagatt ctagccgttc tgaacctttt accttggtag ctactatcct caacgcacat 180  
 gaaggtgagg ttaattgtgt gaaatggaat ccacaggatg gttacgtctt cgcttcttgt 240  
 ggcgatgacg gtgtaataaa tatttggcag ataagtataa actaattctg actttcggac 300  
 aagacgcgtt gttcactagc cgttgtcgtt gttctccata ttgttattta ctgttcgtgg 360  
 g 361

<210> 3315  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-H10

<400> 3315  
 gcgctcagcc caagcgtccg aaaggagacc caaattaagg tgagagaatg gacgataagg 60  
 aactaggcaa aaggatatgg tatctgcggt agaacatatg aaagaagcag caccgactgt 120

ttagcaaaaa cacagcactc tgcagaaaag agaaaatgta aagtatagag tgtgcggcct 180  
 gccaaatagt agagaaaaaa tcgatgaaag tgaaagcgag taaaagatga ggtatagaga 240  
 atggcggtcc taactgtaag gatccaaagg tagcgaagta aatagacgtt tgaaaggcgt 300  
 ccagtatgaa aggagaaaacg agtgtagcac tgtctagtcg tccaactcag cgaaacagca 360  
 ataactgtga aaatgc 376

<210> 3316  
 <211> 182  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-065-Q1-E1-H11

<400> 3316  
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 gggcacgaag ttgcatanga atatgtcgag taacanagaa gaaataaata aactaagtgt 120  
 atttgttttc gaagaagaag cgtattctgt ctctcttggt gcttctttgc aagggaacaa 180  
 gt 182

<210> 3317  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-H12

<400> 3317  
 cgcgtcagca ataattgtcg ttagtggtgc aaagccaaaa gcagttgagc acagcaatat 60  
 cgatatgtca agtggctgga ataactacag tggaacggaa ggtaatggga atgctggtgc 120  
 tggtaaggga aagaacaagg ataagaagac tagtgagaaa cttgcaaaag atagtttaaa 180  
 gggtttgga atggcagcct tgtcagcggg taagctggtt tatcgcggtg gcaagtgggtg 240  
 tgtggataag gtggaaggcg ccattgacga ccacaagtca taaggaagta agagtggcgg 300  
 tggtggaat tcacgttatt ctcggtgaaa cgtaataacg tggatagaaa cagaacgaga 360  
 cgggttttta tagttgtgt gctggat 387

<210> 3318  
 <211> 370  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-065-Q1-E1-H3

<400> 3318  
  
 ggaagtagaa agaagagagt gtaaggcggc gtcataatag aaatccgaaa ggagtagaag 60  
 aaaagagaga gaagaaagaa aagaagagaa aagccgtact gaagaccgac acaggtactc 120  
 gaggagaaag gagacccaaa ttaagggtgag agaatggacg ataaggaact aggcaaaagg 180  
 atatggtatc tgcggtagaa catatgaaag aagcagcacc gactgtttag caaaaacaca 240  
 gcactctgca gaaaagagaa aatgtaaagt atagagtgtg cggcctgcc aatagtagag 300  
 aagaaatcga tganagtga agcaagtaaa agatgaggta tagagaatgg cggtccaaac 360  
 tgtaaggatc 370

<210> 3319  
 <211> 329  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-065-Q1-E1-H5

<400> 3319  
  
 gaattagaga atggagagtt gctatggcat tgtgcatggg gttgaataca aactgtcaga 60  
 ttcttacgaa attgccagct gttttatcac aggaactttc tgggccaggt caggagtctt 120  
 ctgatatgaa tgctctcaga gaagctgaaa tccctgaagg aaactctatt catttaaatg 180  
 accgtctgtc cgacaagaat tgcaacgtca atgaatctgt agagactgta cacaaactgc 240  
 cacaacactt gagaaatgat caatacgaga aggcttggga tactgaggct catactatac 300  
 aaccaaagca ttggacttgc agccttttc 329

<210> 3320  
 <211> 305  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-065-Q1-E1-H8

<400> 3320

tggtggggccc tgtggtggtg atgccctgga ttgagctacg tagtggggaac tccgctgtct 60  
tgaaagacat aactgcaagt attgaaaagc ctgacataca atggataact acgacgaatc 120  
tcagtacttg tctgaattct gcagaaggaa atgttacggt tgacttgtcg cagcagtgtg 180  
gcttgaaaga tatattttca ttgaagcttc tcgagaataa ctttaagttg gcgtgtttta 240  
atgatgcctt gtttttagtt ttaccaggct taccctttgt tattactggt aatcgatat 300  
tctgt 305

<210> 3321

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-065-Q1-E1-H9

<400> 3321

agcttacaga catgatagcc gatcgcttc acattcaagg tctccacctc cccgaagaag 60  
ccaccggtcg aggagcagat ctctccccg aagaagattt cgacgatctc cttcagatag 120  
tccaaggaga cgagatgact attctcggag tagtagtaga agtccgataa ggaaggaaga 180  
aaatagaaat aggaatcttt cccccagcgc ggagaacaac catcgtgatg agggcagtta 240  
tgaagaccgc cgtaggtctc gctcaaggag cgttgagagt actgagagga ggcgaggtga 300  
gaattcccaa aacgagtcac ctagaggtga agatgaatac taaagtttca aggaagtga 360  
cgacctgatg ttccttgaaa cgttcccctt ccttctggg gtgg 404

<210> 3322

<211> 392

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-066-Q1-E1-A1

<400> 3322

aggcaatttc cagagttgat gtcggaggat aaccgtgtct ttgttggtgg tctcccatgg 60  
tctataagtg aggacgactt gaaacaagta ttttccaagt acggagaagt cgtagatgcg 120

aggggtgggta tggacagaga aactggacgc tctcgagggtt tcgggttttgt ttcatacgct 180  
 gaaagctcgt cagtggacga atgtatagct gccttagacg gtcaggacct acaaggtaga 240  
 accattcgtg tcaacaaggc catgactcgt gaacaacgag atgaagagtt tgcttccgga 300  
 agaggagggtg gacgagggtcg ttatggaggt gggttttcgtt ctgggtgggtg ctttgagcgt 360  
 anggactacg ataaccgcag gaactatgac cg 392

<210> 3323  
 <211> 245  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-066-Q1-E1-A2

<400> 3323  
 agcccaggca tcagggtgctc gtaacgctgc tcgagtgatt aggaaggggtg gcatccaaaa 60  
 tgggtaccctc aagggtacacg tggtttncggg aaaagtcaag gtttcgggtc aacagaacct 120  
 aaggggaagat aaggtcccca cggcttggca gttcgcgccat tttagtagta agtttaatgg 180  
 gtttaacacg tccagtggca attccggccc taaacactgc tagatgaagg aaatgctaac 240  
 ctatt 245

<210> 3324  
 <211> 373  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-A5

<400> 3324  
 agcccacgcg tccgattcgc ttgtggcgtg tgaagttttg gttaccttga aagaatgcag 60  
 atatttgtaa agacacttac tggcaagact attactcttg aattggagcc ttcagatact 120  
 attgagaatg tcaagtccaa gatacaagac aaggaaggaa ttcctccaga ccagcaacgt 180  
 ttgatatttg ctggaaagca acttgaggat ggtcgtactc tttcagacta taatattcaa 240  
 aaggagtcta ctcttcactt ggtattgcgt ttgaggggtg gaatgcagat atttgtaaag 300  
 acacttactg gcaagactat tactcttgaa gtggagcctt cagatactat tgagaatgtc 360  
 aagtccaaga tac 373

<210> 3325  
 <211> 385  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-A6

<400> 3325

agcccacgcg tccgccacg cgtccgtgca aagccaaact atttggaaacg tttatttagtg 60  
 ctcgttactc aagttggatt tttcgccctt tatactacta tttatctatt gtcacctaata 120  
 actgcacatc gtatcgttgg ttacttagaa gaagaggcag ttgtatcata taccgaatat 180  
 ttaaaaggaa tcgatagtgg tttgcatgca aatattccag caccgcaaata tgcgattgat 240  
 tattggcaac tagatagcaa tgctcgtttg agagacgttg tattggcagt gagagcagat 300  
 gaggcaaata atcgagacgt gaatcacctc aaagccaata tttatataac aaagcgtgga 360  
 aaggaaactg cacctttgtc cgtat 385

<210> 3326  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-A7

<400> 3326

agggggaggg aggaggatgc aaggttggaa gaaaccagtc ataaccgatg cttttggaaa 60  
 cagagtaact tatgtgttga aaagatattt caacgcacct actactggag aagagttgcc 120  
 acattcgttg ggtggtcatg tgaccgatgc agatacgttg ttacggcaca aagggttggg 180  
 agaagaaaca gcgtattttc tgaaagaaga cgctcgcaag tttgaaaagt tggcaaaaca 240  
 gttgaaaagt gcgttgaatt cagggaaact aatgacaaaa gaacaactca aagtgccat 300  
 ggaacagaga ggaatacaag tatctgaaga gggtttagag gacttgcttc gtctaaaaga 360  
 gcaattcga ttctcggatg caagtagcag tggtagctaa gaaca 405

<210> 3327  
 <211> 342  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-A9

<400> 3327

cggtgcgacc caaacgtacg gaaaactgca acaacgtcat tcctggcgac aacaaacaga 60  
caaggtcaca agcaatcgga acccgcaatc ttcgaagtag aacaattccc aagcccaatt 120  
aaagtagttg ttttatatct cgctgatatg cctttgtttc tcaaacata ttgaaagctt 180  
ttgaatgtgt taaagagact gatttttctt taaaaaaaa aaaaaaagac aaacaaaaat 240  
aaaaaaaaat agcaaaaaaa aaaaaaaaaa acgaaaaaag aaaggaaacg aaaaagaaca 300  
gaaagaactc aacactagac atgaaataaa aaaaaagggg gg 342

<210> 3328

<211> 441

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-066-Q1-E1-B1

<400> 3328

cacgcgtcag cttgacctca ggaagtcttc tagtgcaaac cttgtatcct cccacgaag 60  
aagcaccacc acaatgtttc tcctcctcat ctagtatgga aaatgagagt agctacgacc 120  
agttctccag aatcggggtt gggtgaaaag tcggaagagt cggtgggtat tggaattatt 180  
ggagcaggaa gaataggcca agtacatgca gaaaacctgg ctttccgtat caagaaaggc 240  
agattgggtg gagttgcttc aggaaccaa caattggcag aaagatgtag tttggctact 300  
ggatgtaagc cttattatga ctatcattta ttattagagg atcctagtgt ggatgcagtt 360  
tgtatttgtt ctggcttcaa tcaacatacc anacagatta tggaagctgc aagagctggc 420  
aaacatatct tttgtgaaaa g 441

<210> 3329

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-B3

<400> 3329

aggaaatgta caacgattat atagacgcag gtagcaccca cgacgatgaa aagaatacta 60  
 cttgggagaac aacaacttcc caagtatcac ccgaacaaca acaagaagct gcacagtttc 120  
 gacaacaaca attacaacaa caacgaagtt tacaagcggt gaacgctacg cttgcccagt 180  
 tttgggacga acaaatgcga gaggtcagcg tcatcaccga ctttaaaaac catatgctac 240  
 ctttggcaag aatcagaaag attatgaaat ccgatgaaga cgtgcgcatg atatccgcgg 300  
 aagctcacgc cttgttttct aaagcttggt aaatgttcat tttggagttg accattcgag 360  
 cttgggcaca aacagaagag tcaaagcgta gaactcttca acgttggtg 408

<210> 3330  
 <211> 428  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-B4  
 <400> 3330

.gaccacgcgt cagcggacgc gtgggcgac gcgtggggta gtggttttaa taaatattct 60  
 atttccttta aaagaaaaaa aaaaaaatc aaaaataaca accaaacaac aaaaaaaaac 120  
 ggcaaaggtt tcaacaacag caattacaag aagaacgcac atttacaatg cgtcgaacgc 180  
 tacgcttgca cacttttgcg acgaacacct gcgagatgtc ctggtcacca cccacttgaa 240  
 gacccatatg ctacctttgg caggaaacac cctgactatg acatcctttg accacttgca 300  
 catgatatac gctggagcac ccgccttggt ttctaaagcg tcgtcactgt tcaactttgg 360  
 aattgactat tcgacccttg ggcacaccac agaactca cagctgtgaa ctcttcaacc 420  
 tcgtgata 428

<210> 3331  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-B7  
 <400> 3331

agttttaata tttgactcca ccagtcaacg attcgggtgc gctgctgaac acgtttatga 60  
 cgtaaacgag aataccaagt tgcgttttgg tgggaaagtt cgtcacggag aatcggaccc 120



ggcaggatat gtcattgccg aatatgactt tacggtttcc aaagaagatt ttccgataaa 180  
 cgttcgtgca cgtgcgatat gtaaaagtaa ccagtgcac gccgatattc gtgccaaaaa 240  
 gaagtttgaa gtggacgaag acacttcttt attcttcttg gccaaagctt gtactcagga 300  
 actaacaaaa ggaagttata ttattggtaa agctggagtg acacgtgact ttcgtttggg 360  
 tgaagacact tttcggttgg gtgcggtgtg tgaccaagat ggaaactgt 409

<210> 3332  
 <211> 396  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-B8

<400> 3332

aggtagaaag aagagagtgt aaggcggcgt cataatagaa atccgaaagg agtagaagaa 60  
 aagagagaga agaaagaaaa gaagagaaaa gccgtactga agaccgacac aggtactcga 120  
 ggagaaagga gacccaaatt aaggtagagag aatggacgat aaggaactag gcaaaaggat 180  
 atggtatctg cggtagaaca tatgaaagaa gcagcaccga ctgttttagca aaaacacagc 240  
 actctgcaga aaagagaaaa tgtaaagtat agagtgtgcg gcctgccaaa tagtagagaa 300  
 gaaatcgatg aaagtgaag cgagtaaaag atgaggtata gagaatggcg gtcctaacgg 360  
 taaggatcca aaggtagcga agtaaataga cgtttg 396

<210> 3333  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-C1

<400> 3333

agggcgaata ttcgatgcgt agaaaaaatg aaaatgagac gacttgtcaa aaacactgct 60  
 tatatttggga tgaataaacg tgcacaaaaa tagtattcaa gaatatgttg agtatacaag 120  
 ttttgcaagt atggacgaat gagcgtatgg aactaaciaa gttgaagatt gctaccaagt 180  
 ttgaaatggc actggaagaa actcctttat atatgaatat attatcttca cgatcaacga 240  
 gaaagcgaaa tcgagagtgc attgaattga gtgagcacia gcagaagctg gtgccaaacc 300

aagtagtatc tactgcaatt ccagatatat actttacaat gacgctttac agcacggcaa 360  
 ggtggaagag aacaacggtg cttggcagta ttgtgcgtcc tatcgatgac ttgtcaaaga 420

<210> 3334  
 <211> 235  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-C3

<400> 3334

cgcgtcagcc caagcgctccg ggggtattaca agagatacac ttcataagcg tcgccttacg 60  
 ggaggtaaaa aggctatatg gaggaagaaa cgaaagtata atttgggaag acaacctgca 120  
 aacacgaagc tgggtccaaa ggcagtagca cctgtgcgag taagaggagg caattacaag 180  
 ttctgagcac ttccaatgga ttctggtaac ttttcatggg gctccgaggc gccta 235

<210> 3335  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-C5

<400> 3335

agaatggttg gtttcgtcgc ttcggctcctt cttttgtgat tctcgtgtat tgcacgagaa 60  
 aaagtcctta agatggaaag agctttgaaa agcagtgac gtcttggtgcc catacgtcca 120  
 aagcctgttg taccttcaaa aggggtctgaa actttttcgt tgcagttagt tgggtgccacg 180  
 tgggatgggtg gttgcacgta ctatataagg ggaggagggt catatattac taatgggaga 240  
 attacagtac cttcaagggc gtctaataccc atgaccaagg acgagttctt cttactgggt 300  
 acttactcga gagacaagct ttgcccgtg ttgatagaa ctctacaaag ttccgaaaca 360  
 cagtagtggt ggttactttg ggggtgtattt tcacagttgt ttaataaac 409

<210> 3336  
 <211> 368  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-C8

<400> 3336

agggaagtgt tcgtaagcat caagaacttt caaggaaacc aaaactggcc aaccctggta 60  
ccaacggcaa ttctccaac gcatttttgg gaacaattag tcctttgggt gaatttaatg 120  
gcggtttga taatcaagga ggaattaaaa tactgaacca aaggtgtcaa aagctggatt 180  
agttggagca agtgcaacaa agaaagatta atgattggaa agagaaacta aaagttcttc 240  
aagccgtgt cgatgaaaca actggcaaag acaaaagggt ttgagagcga agaagagtat 300  
caaagaaagt tggagcagct cgaaaaggaa aaacaaagca tcatcagtga aaatatgaaa 360  
gctgaaga 368

<210> 3337

<211> 342

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-C9

<400> 3337

agcttttggc ggtggttaag agacatgtct caaaatttgt tacgttgag cactaaatg 60  
catttacttg tcgtttaaac gacagcttcc aacagattga ggaacgactc aagatgttgg 120  
aagtaaaggc aacaagacta gaggaaacga cgaataaatg ggacaagtgg ctacgaagta 180  
ttggaaaatg gagagtgaaa ccacaagaca acaaaaaagt ggttgcgaaa aaatagacct 240  
ttccaacgat aatggtgtca caagttctta cacacaactt acaagctcaa aaaccaacat 300  
gactttatga agcgcttata aaccgggaat ttctgtcttt tc 342

<210> 3338

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-D1

<400> 3338

aggtaacaca caatatgatg atgatgatgt gcgtggtaga agagaatcga gttgtaatta 60  
cttggagcct acaaatgaat cctcccatgc ttccctattg gaagaagaaa gtggagatat 120  
tgatctggaa tcttcattga atcgttttca tatggatatg gagttgagtc aacgtgctcc 180

acctccacca cctacggcac cttcttttagg attagaactt ggaacgtccg cacctgcagg 240  
 ttctggtctt cctgcaagtc ctttttctgt tgcgtggact cgaggctcga ggtcatcgag 300  
 tgttgacca ggagaaatga ggacttccaa gtggctacgt gctagaagag gattgacaag 360  
 cagtgaaaca agtgatcgaa gtcagatgcg ttcacgagag acttgatgaa gataaagata 420  
 tct 423

<210> 3339  
 <211> 311  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-D10  
 <400> 3339

gggtcgaccc aagcctcaag ccaagcctcc ggaacgacac tacaatgggtg gtggaaaagt 60  
 tgtgtttaac gcaaccgacc actccggatt tgcagtgggt caagctcgggt ttccggatta 120  
 caacgatgaa atgcaacatc catcgccatc ccaggatggg tcatcgttgc aaaacgaaac 180  
 agagaaaata acgattgttt ggaagcttgg taaaatacaa gaaggattgc atttggtgt 240  
 ggaacgagta tgggtaaacc ataccaagta tggtaaacag tttcaggtgc aggtgggaca 300  
 gcagaacctt t 311

<210> 3340  
 <211> 404  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-D12  
 <400> 3340

gtttgttgaa aagcagcatg atgaagagcg ctatgaagtt ctttgtatctt agcattatctt 60  
 tggcaaatgt tggtcttact attcaagcag caacggtttt ggagactttg gagtcactga 120  
 aatatacaga gtatcttgac atggtaaagg ctgcaggcct gcaactcgaag ttcaacgact 180  
 ctgctgttac atggactgtt tttgcagcaa acaatactgg agtcaatgcc accttggcac 240  
 cagagcactt gggttttctaa tatcacatct aatgcgacgg agagcaaaga cattgtggaa 300  
 tatactttgt acaaccatac tcttttgtca gatgatatta agacaggaac aactatcctt 360

accgccgtaa acggaatgaa tttgactgtg gttaagaata cgac

404

<210> 3341  
<211> 318  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-D2

<400> 3341

aggaaatttc agggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaataaaa aaaataaaaa gaagataaat tcaaaaaaga 180  
atgattttat aaatacctag acagaaaact tcattgatag taaacaacta ttaacacatt 240  
tttaaaaaaa cggcactttc gttataagta agtactacct gatattgaat gcacaatgtc 300  
gaataacgaa cgaggatt 318

<210> 3342  
<211> 375  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-D3

<400> 3342

accacgcgtc agcaaaggct ctgtgacttg aaacaaggct acactcagtt tggagggtttg 60  
aggccctttg gagtatcttt ccttttcgct ggttgggac gacactatgg tttccaactt 120  
taccagtcgg atccaagcgg taactatggt ggttgggaagg caacagcaat tggcgcaaac 180  
agtacagctg cacagtccat tttgaaaacg gactatcaag atgacatttc tttgaatgac 240  
gctttgaagt taactgtaaa agtttttagga aagacgatgg acagcgctca gtttaactagc 300  
gagaaacctg aatttgcgac cctctcgttt gtcacacctg agcttctcca gttccaccac 360  
ctttcaactg aagag 375

<210> 3343  
<211> 405  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-066-Q1-E1-D4

<400> 3343

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ggaacacggt atggcgcttc tataagaaaa cagataaaga agatagaaat tgcccagcac 120  
gccaaatatt tgtgtgcttt ttgcggaaag gattccataa agagaaaggc gggttggtatt 180  
tggtactgta aatcttgcaa cagatcaata gcgggaggtg cgtggtctct gagcacccaa 240  
gcagcagcaa ccgtaagaag taccattcgt cgtttgagag aaatgacaga atcgtaacgg 300  
agcaaattatt accaacttgg ctgtntgttc gcaacttgca agtgaaactt gctgtttcct 360  
ttatcaataa gaataaagag acgaggggtct ctcactttgc gacaa 405

<210> 3344  
<211> 409  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-E10

<400> 3344

aggttgagct ttgttttggc actgtttttt tggggtttca ctggtgtgtt ttgtattttt 60  
aaaactctaa gaagactatt tatttcttgt tatgttttag agtcttttct agactctgtt 120  
ttttggagtt gttctactcc agtcttggtg gtaggtgaat ggttctagtg acaaagaggg 180  
ttgtcacttt cccgccattc tccacagctt caactaccaa cttgtatacg ccacaaactg 240  
cacaactata ttactacaga gtcgtggtgt aaaacgacaa gttgagtggt tgaaaaggat 300  
tggtgaaaag caaaggacta gtgagagaga gcaacttgaaa acttgtatat ttgtaccccc 360  
tagaaactat ttccgcttga agagattgca agtttggtgt attcgacaa 409

<210> 3345  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-E3

<400> 3345

aggggaagctg gcgagcattg gggtttcttcc cgagagagaa aacgagtgc aaagttgtct 60

ttc gatgtct agtgttgatg cgc atccaac aatagtttat cctcattatg tcagagcttt 120  
 agatgaagaa aaagctcaac taccatctag ttttcctcga gaatattcgg aagagtttca 180  
 acacatttta cccaagttgt tgcagcgcgg ttttcatata ctaaccaaac taaacaacca 240  
 aaagggtaat ttatcaaata tttcgaaaaa ctttgtgttg agccatccac atattcacgt 300  
 cgttattctt cgaagagccc tggatgggtgc tgttatttac tccgcttacg tgggttccca 360  
 ggtacaaggt ccctcgggtt ttatgcatgg aggagctaca gcagca 406

<210> 3346  
 <211> 436  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-066-Q1-E1-E6  
 <400> 3346

agcccacgcg tccgctccca tgaaagatac agagaacaag gacagtcaag atgtagagtc 60  
 tggaaagaag agcgaaaaga agaaaaagaa aaaggacaaa catcgtgata gtcacggaaa 120  
 acatagcgaa tcgaaggaga agcacaagaa ggattcgaag aaaagaaaac acaaacattc 180  
 gtctgaaaag aagaaaagga aacgaagctc agaagttcca tcgacagatt ctgatttattc 240  
 aagtggagaa gaaaaaata ccaatgagaa tctgcaacaa tcccagtttg cgacagagaa 300  
 tactcatagc aacaataatc ttatatcttc cccgcagaat aatttcacgt ctccacanaa 360  
 aaangatcga cccgagacaa aatcttttct ctccgaaaca acgaccagac caaactcagt 420  
 ggaatgcaga agcaac 436

<210> 3347  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-E8  
 <400> 3347

agcccacgcg tccgccagag ttcaagaaat acgcatttca ggttcaagcc aatgcccgag 60  
 ccttagcggc ggaactggaa aagcgaggat ataaacttgc tactgggtgga actgataatc 120

atcttgtctt gtgggattta cgcccagtaa atcttacagg ctccaaaatg gagaaaatat 180  
 gtgatgctgc gcatattact ttgaataaga atgccgtaca tggagatata tcggctcttg 240  
 taccgggtgg agttcgaatt ggaactcctg cccttacttc gagaggtttc aaagaaagtg 300  
 attttgtcca agttgcagac tttttagata gagcagtga accttgctctt gcaattcaag 360  
 aaaagtctgg aaagaacatt aaggatttca atat 394

<210> 3348  
 <211> 327  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-F2  
 <400> 3348

agcttacaat atatatttgg tgaaagacaa gaaagaaact ctctgtggg atggcaagtc 60  
 aaagggctct cctcgcaagc taaaatttcc tcaggcagaa accatcctgg agtcactgaa 120  
 tgcttagacc agttatctag tcattcggag cctttcgcta tatgacgact ttaccgaaa 180  
 agaatccgtg attctggtac aagtctgaca acgtttattg ttctttttgc agtcgaaaga 240  
 acagtaatta ctagtaaagg ctgagaagac tggagattgt tatttaaaaa gaacaatgtg 300  
 agtcctcagg tgtatctgcc cgcggtat 327

<210> 3349  
 <211> 325  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-F3  
 <400> 3349

agcccactct tccgcccacg cgtaccgca agatgttctt tatgaacaca aagccgtaca 60  
 agaagctgcc gttatcggtg tgctgaccg atctcgatga gagactgtcc gaggttttgt 120  
 tgctcacaag gtggaatcca gaatttcgga atcagatctc aaatgattct gcaagtggac 180  
 actctgcgtc tacacctatc ccagaaacat cacaatttca tcgcagaaac cattgctctc 240  
 ctacgcggtt gattccttcg agttttccag cagaacatgt gattgaaatc ttatccgcaa 300  
 tctaactaca atgttgtcac tggca 325



<210> 3350  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-066-Q1-E1-F5  
  
 <400> 3350

agagcagcaa agtgcaacaa ccagaaaagc agtcaactcc gccctcgtca cctcccaagc 60  
 cacctcagca agttgttgag acaagtaagc agagttttgt aggttctgaa gtgggagtaa 120  
 agagagtggc aatgacacga atgaggcgctc gtattgcgga acgactaaaa gaagcgcaga 180  
 atactgccgc tatgcttacg acatttaatg aagtagatat gtctgctttg atggagttga 240  
 gaaatagtta taaggaagcc tttgaaaaga agcatggcat tcgttttaggc tttatgtccg 300  
 catttaccaa agcagcaact ttggctttgt tagaacagcc ggaacttaat gcttatattg 360  
 acggcagcga tattgtatat catgactatg tcgatatctc cg 402

<210> 3351  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-066-Q1-E1-F7  
  
 <400> 3351

agcccacgcg tccggcagcg tttgcaattt ttgttgtgag tgagtagtgt catggcagag 60  
 caacaaagaa gtgagagtac tgaagttaga agtgctgcag ttcccacccc ttgtataaag 120  
 ggttgtgggt tttatggtac ctcttccact cttgacatgt gctccaagtg ttatagagaa 180  
 catttgcgcc aagaggaaca aagacttcaa gtggagtctg tatgtcagca gcagcaacaa 240  
 caacaacaac aacaacaaaa gcaggataag gaacaagaaa tgactcaagg gtccgagttg 300  
 cagcacttgc cctctaaaaa ggagcaaggg gaagagacgt cgggtggaggt ggctcaacct 360  
 agccaggggt ttgttgcgga gagttgccga ngggaaaact cggaatttgt 410

<210> 3352  
 <211> 206  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-F8

<400> 3352

agccccacgcg tccgcccacg cgtccgcccc cgcgtccggt attggtgagc agtacaagct 60  
atccatgccc gtttctgtat gggcgctttt tattcgact tagtatttag gcctccattc 120  
ccaccttcat atacacagga agacttccat aaaactggga tagaaccac acaaaacagt 180  
gtgtccctgt gtacacacat tgaaga 206

<210> 3353

<211> 259

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-066-Q1-E1-G2

<400> 3353

gtccgacagg cgctacnggg aatacaacta gtttccttag ttcggtttcc acgggaatac 60  
caaccagtgt accaacaaca tcatcttoga ttactatcct tactgtcttg caagacaacc 120  
actttgacga tacagtacaa gctataaatg cggcaggact tgactctttg tttaacaatc 180  
cttccgctac tcttactttc tttgcagcan atgactctgt atgggtctact tctacagctt 240  
ctcaagctct gagtgtctt 259

<210> 3354

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-G4

<400> 3354

agcccaagcg tccggttgag gaacgatgaa gtggcaaagc ggtcctagga atacaagttt 60  
taataggata caaacgctac tgcttttctt gttgattatt tgcaacgttt ttccatatag 120  
ttactctata caattttata tgaacgctgg aacgaagcgt tgtctttcgg aagaaattac 180  
ctcaaacaca aaggtgtttg gtgaatgtct tgtagtcggt gcggaaggct ccatgtccgt 240  
agatctgttg attcgaggac ctcaagggga gactatagtg caacagaaga acatagataa 300

gcagtcattt agcttcacaa caccacagca cggtcttgct ggagattcga gtttggttc 360  
 caacgatatt cactggcctc ctgcaagtta tcacttttgt ttcgaagcta gtctctctcg 420  
 tcctctctc 428

<210> 3355  
 <211> 341  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-066-Q1-E1-G6  
 <400> 3355

aggaccgaca caggtactcg aggagaaagg agacccaaat taagggtgaga gaatggacga 60  
 taaggaacta ggcaaaagga tatggtatct gcggtagaac atatgaaaga agcagcaccg 120  
 actgttttagc anaaacacag cactctgcag aaaaagagaa aatgttaaata tataaaattt 180  
 tccggctgcc aaattataaa aaagaaatcc attaaagtta aaaccaatta aagattgagg 240  
 tatagagaat ggcggctcta acggttaagga tccaaaggta ccgaattaaa tagacgtttg 300  
 aaaggcgtcc attatgaaag gagaaacgat tgtaccactg t 341

<210> 3356  
 <211> 196  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-G7  
 <400> 3356

gtctccacg atagcagtga cccatattta cgtgagatca ttttccatga ggatctcagc 60  
 aactggatct ggtatctgct ctctgacatc tggccgggag catcatccac tgtttaccat 120  
 ttgcacaaca ctctgcacgc tatagaaact gtaagatatc aatcggtcgg cctgccacct 180  
 tccactaaac aaatct 196

<210> 3357  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-066-Q1-E1-G8

<400> 3357

agggagaaca ttgcaattgg ttactttccc tgtaatgttt ctcatgttat tgatggttct 60  
gttttccttt tacggagata agaaagtga tttagccttc tttattatcg gagttatatt 120  
ctttattatt gcctatagtc ctggtgctgg tectgttctc tggacatttt gtgctgaagt 180  
atttccaact tatgtgctg cagcaggaac gactattact acttggtttg tgaacgcttt 240  
caactttgcg ctttcattct cgtggccttc tatgaaggct gcatggggac ctcaaggagg 300  
tttcggattc tatgctggtt tcaactttct tggcatcggt atgcagttct tattcttacc 360  
tgaaaccaag ggctttacat 380

<210> 3358

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-H1

<400> 3358

agcccaagcg tccgcccacg cgtccgcca cgcgtccgca ccagcagtga atcagattga 60  
aatgcatccg tattatgcaa gaacagatct gctcgaattt tgtaagagtc gtggagttca 120  
tgtgactgct tattctcttc ttgggagcgg taaacatggt ccgcttcaag atgagacagt 180  
tgcaaagatt gccaagaaac atggaaggac acctgctcag gtattgatcc gatggtgtct 240  
acaacgtggg tgttccgtta ttccaaagag cgtaaagaaa gaacgtatca aggaaaactt 300  
tgatgtctta ttgcaattga gtccacagga tatgaaggaa ttggaagcct tagataagaa 360  
cataatcctc aatcatcaaa aggaatattg gggtttcaat attcacgctt gag 413

<210> 3359

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-H12

<400> 3359

ggctcgaccc aaacgtcagc ccacgcgtcc gccacgcgt ccgcggacgc gtgggtgcaa 60  
atgagcgagc aaaccgacct tccttctgaa ggcttgacta caaagaaaga cctttccatc 120

aagggtggaga atacaactcc gacaattgaa ggaaaaagta tacctgaaag tttgtgggggt 180  
 cagctggaag aacttgagaa ggctgagagt ctttcacaaa ctcatgttga tagcttccaa 240  
 cggaaaagaa aaaaagagga gttcactgtg gagacttttag aagagggttag tgtggaagag 300  
 tcacctacga agagcccaca caagtctacg ggagttactc caaaactgga gtcgctgtcc 360  
 ttatcgaaaa atgaaaatag gttgaaaaga ctagaggagt gtgacctcgc atcactca 418

<210> 3360  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-H2

<400> 3360

agcccaagcg tccgtgatac ttgaatatgc aagaagaaaa ggaatagaca gaattgtaga 60  
 gatgaacggc aaatgggtgga tatatactag gacacctccc aatcgaaagg cactgcggta 120  
 ttgggtatgac atggactgcg tgggtgttgaa cccagtcagg gacttacaaa cggccaaagc 180  
 ttatgcgaga agagtaaaat aagcagtgga gaagagaact acggtcgaat tgcccaaaca 240  
 agatatttgt gtacgacgta gcgacgggaa gaaacacgga gtggctcgcta ggagaggaga 300  
 agatattgag tttgctcaag atacagcggt taaaaggca agtaccgctg gagtaaaagt 360  
 ttggctgaga aagaaaccgt actggag 387

<210> 3361  
 <211> 243  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-H6

<400> 3361

agcccatgcg tccgagcaat tacaatttgg gacatctgta ggcgctgccg ttgagtaatt 60  
 ggagtatgag tgagaacata ccaacggagg acgtcccata ccaccgttt ctaggagaa 120  
 ctgtttactg gacgccttgg ccacgcttgg ctaaactcag tcctaacgaa agggttcgag 180  
 ttaatggcag cgttctgatt ataacggcgt aaagtgggtg gatcatctac actgaactgc 240  
 aat 243

<210> 3362  
 <211> 327  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-066-Q1-E1-H7

<400> 3362

agggaaaacg tcatgcagtt gcgtattcct tctgctgcag tcaaagcaca gtacttcgac 60  
 ccaacgcaag ttgttggtga ccctgtaaga gatacatcac gtccctcttg cactggaggt 120  
 tctgtgttac gaatactatg ttgcgatgga gtaattattg gtgcagatac tttaacttct 180  
 tatggatcga tggctcgatt tcaaaacttg tcgagacttg tagacgttac tgacaattgt 240  
 ttgttgggtg gtggaggtga aatttccgac tttcaagaaa ttcaacgtct ttagaaaaac 300  
 ctcatcacat ttgacatttg ttttaat 327

<210> 3363  
 <211> 351  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-067-Q1-E1-A10

<400> 3363

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 aggtgcaacg ggtccgcttg gaaaagaatg cggtctggca ctggaaagtg aaggatatcg 120  
 tgtecggtgca gcaagcagaa ggggtgaaac ggctcgtgag atgctactcc acaaggtaaa 180  
 gaacccttcg agagtggact ttgtccatgt cgatgttatg gaaaaatctg tactttctag 240  
 cgtattaaag gatgctgaag tgggttttctt ctgtgcttca gcttctgcan ggtggagagt 300  
 ccctgggtact tctaagaaca ccccgaaaca agtggactac ttgggcgcca t 351

<210> 3364  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-A11

<400> 3364

acaagcctca tagtctgagt catcagtaac ccagttggat agagcctcgg agagacgttt 60  
cgcatacttc tggatgatgat tatctatttc atgaggacgg tggaggaact actcagggca 120  
gtggtcgtga agaagaaagc atccaaatag gagtttggtg tgggaagagt tgttgtaaaa 180  
ataacagttg gcagatggtg aaccaagtcc ttgcacagtt taaaggggtg tcattcgaaa 240  
caaagcccag taaatgcacg aagctttgta gtaagaatgg cgtaacggtg aaagttcagg 300  
ataagacttt ggggaatatg aatgctagta ctctttacca agtggtgaat acttggaac 360  
actgcgaaag ccaggaacca gaattgcgtc ctg 393

<210> 3365

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-A12

<400> 3365

aggtcattgc caccaaacca caacgattct ttgtgtgttg gatcgatgga agctctccta 60  
tttctgttct tcaattgtcc tttgttgaca aataagagtt tattcaataa aacaaaaaag 120  
tgctatcctc gtagaagaac aagaatgtgt tcgtccattc ctgtggatag acgacttgta 180  
tattttccgt tttcgttggt agagaaacaa aaggatgcaa gttggacatt gaattctaag 240  
gctgtatcag agtttctcca acaatacaaa cattctccag ttttattcag aaattgtttt 300  
cctgatctat tttttgcaat tactccagaa gagctggcag gacttgcgtg tgaagatggc 360  
ttcgtgtctc gtatcgttca actc 384

<210> 3366

<211> 345

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-A4

<400> 3366

agcgccaca tttggattct ccatgtcttg gcaagtctat gtagaccaac atttgcttgg 60  
ttccggaaag gtaaaagacg cagcaatagc tagtttaciaa gggaatattt gggcgcgcttc 120

tgcggggttt caagcttcca cggaagagtt gaaaaagttg attgcaacct ttcatacaac 180  
 caaagaagca gctcaaaacg gtattttttt ggggaataag aaatactttt ttttgcgttc 240  
 gacagaagat actatttatg ggaaactggg tgacgatggc tttgtagcta tgcaaaccac 300  
 tatgtgtctc atcatagcga tatttaccag acccgatatct gccgc 345

<210> 3367  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-A6  
 <400> 3367

agcgttattg tagtctacgc aaaacaaatc aagttattgt tacacatcaa agtattcacc 60  
 actatagctg gaataggaaa tggattgcgt cgtcaagtga gcaaagccat caaagacctc 120  
 atgtacagtg gtatccaggg catattgcaa aggcagagag actcttaaaa gaaaaactca 180  
 aacttgtcga cgttgttttg gaagttagag atgcaagaat accaaagtct actgagcatc 240  
 cagaactcat ttcttggatt ggtgagaaga aacgattgat agtgctcaat cgtaatgata 300  
 tgggtcctcg cgaagcaata accttttggg ttagaacaat gaaacagcaa ggttttcaag 360  
 tttttgatac aaacgcg 377

<210> 3368  
 <211> 324  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-A7  
 <400> 3368

cgaccaagc gtcaggcata ccaatgatcg ttgaggaatt gtgagcagca gccatgtcga 60  
 aaatgctatt acgtcctggt tggaaacacct ttgcacagtt gacagagagg gggacagaac 120  
 aactaggttt gctgtcagag aggtctattc aggcaactag tgcgcggaac tttttctgaa 180  
 gaccctaaa tgaaggacaa tcccctcctt cgtcatcgtc caaaaatacc ccacaaagtt 240  
 cttcttgcca gaaagttcct aattggaacg aaggggggga ttccacggca accacattgt 300  
 ttgcaacgga aatgattcga ggac 324



<210> 3369  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-A9

<400> 3369

acggcagagt tgatacagaa aatggaaact agttggaaga aacacgttga aatttttgct 60  
 gaggcgtcga ttgctttgtg gcatacacia atgcttatga ttgatgagtt ttccaagtcc 120  
 tccgaggaga tacggcctta tgttcaagat tacttgaata acttgaacac aagtagtgga 180  
 aattatgtcg gggatggaac atcggcgaca cttggagaga gtatggaaca gtcaaaaagt 240  
 gctgaaagtg aagacaaaag gactacacga ccatttcagc gttcgaggca aacgacgggt 300  
 aactcggaca gttcttctcc aacttttagat gaaaacggaa agcaagcttc gtcttcggat 360  
 atttatcagt ctatgagaag tgctcaagca tgaa 394

<210> 3370  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-B10

<400> 3370

ggtgcatgtc ggaggaagag gaagcagatt ttcgagggaa ttgtgactcg gttgctattc 60  
 caaagaccac cgtgaacaaa gtggcgacag aagtacttgc caatgccggt aagttgccga 120  
 aagaaagtgg acgaccaaga tggaacgatg tatatgatca ttgctatcgt atataggtgc 180  
 gcatctttcg tccgatgcca aagaactatt ggttgggttt tgttctgaat tcgtgcaact 240  
 tgttagttcc cacgccaacg aattgtgtga aaaggaaaac aaaaaggtta tttctcccga 300  
 acacatttta cagtcgttgg aagaactggg gtttggagat tattgccaag aagtgaacaa 360  
 agtgtatgaa g 371

<210> 3371  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-B11

<400> 3371

ggaacgtaaa tggtttgaa tcgttgataa gaaaaggcta tttacaacc tttatacaac 60  
aaacaaatcc agatattatc tgtttccaag agacaaagat ttcccgaagg aaactagcgc 120  
agtggagtgt ggtcaccaaa gactggaact gctttctttc actttgcaag tcaaacgaag 180  
gttattctgg tgttggtact ttttgtaa at tgttttgccc gttgttcaag gcagaagaag 240  
gtataactgg tttccttcc tgcagagtgtc tctcgtggaa ctcgaaacga ccgtgggttt 300  
gtcacttgag agacaatccc acatggagag aaacttccta ttctgtgggg taccattttg 360  
aagttggggg agactcggat aagttattgg gactagat 398

<210> 3372

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-B2

<400> 3372

cacgcgtcag cccaagcgtc cgcccacgcg tccgccacg cgtccgcca cgcgctccgct 60  
caagatgtct tttttgaaac gtatacagtc gactctgctt tccaacagaa actcagtgc 120  
aaacgcaagt aaggccaatt acgacataaa gcacgttcgg gtttaccgct gggaccctga 180  
aaagggagaa gaacctaaat tggttacctc ctcgattcct ctcaaagaat gcggtcctat 240  
ggtgttggtat gccttattca aaataaagaa tgaagtggac tctacttttg tatttagaag 300  
gtcgtgccga gagggaaatt gtggaagttg tgcgatgaat atagatggaa agaaccgtct 360  
ggcttggtta actccg 376

<210> 3373

<211> 333

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-B3

<400> 3373

gagccacgcg tcaaggaaat cgagtccttg ttgaaagaac gagatgctat tttgaatgga 60

acaagtgaag aatacttgag tcaattggcg ccttttagaga atgaaaggaa acgtagactc 120  
gatagagcta tggactttta tcaacttcaa ctacaatatg cagaacagct gtatgagttg 180  
gccaagaaag aagcatatga tagctttcaa gcacaaaagg cagaacaaag agaatatatg 240  
tggcgtacga agttggaaag agaaattacc ttgagaatcg taagattatc cattccatta 300  
agggacccaa acggacaagt gattgtacga acc 333

<210> 3374  
<211> 356  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-B7

<400> 3374

aggttgacca aacagggact cgacagatat ggcttccggt gttgcagtag acgatacatg 60  
cggaaggag ttactgttc ttgtgagaag cacgccaaga aagtaccgtg ctattatttt 120  
caaactcact gatgacctgt cttctgtatg tgtggaaaag acgcttcccg cagccaacat 180  
aaccaagtgc agtgcacaag aagactggaa aaagtttgtg actgaattgc cccaaaacga 240  
ttgtcgtttt gcagtatatg actttgagta tcaaacttct gaaggtgttt ccaaaaatag 300  
aataatattc attctttggt cacctgaaag tgccaagata aagtcaaaga tgttgt 356

<210> 3375  
<211> 316  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-B9

<400> 3375

acgcccacgc gtccgcccac gcgtccgaag tttggttgtt ttcttggttag cagttgtaca 60  
ttcaacatca tcaaatgcca aaggaggaa agaaagattc ttcaaagaaa gaagccacaa 120  
gtaaacctgc agcagcagat gctacaaaga cgacagaaaa gtctgggtccg gaagccaagt 180  
tgaagggaac tgggtgcaaag aaacaataaa aagttgacta tgcattgtgca gtcctgttat 240  
gttttgtgag ttctgtttga tagtttccag ctattctttt ggtagtgaat aaagagaaaa 300  
ttttttatat ttacac 316

<210> 3376  
 <211> 383  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-C10  
 <400> 3376

cttttgaatc agttggatgg gttttcttcc gatgataata ttaaagttat agctgccacg 60  
 aatcgagtgg atatattaga tcccgcttg atgcgctcgg gtagaattga taggaagatt 120  
 gagtttccctt taccggatga aagttctcga gctcgtatac ttcaaattca ttcaagaaag 180  
 atgaatgttc atcctgatgt caattttgaa gagttggctc gtagtacgga tgatttcaat 240  
 ggtgcccagt tgaaggcagt ttgtgtggaa gctggaatgg ttgctctaag agctgataga 300  
 acggaaatag ttcatgaaga cttttagaaa ggcattgcac aagtgaagc caaaaagaag 360  
 ggaaattga attatttcgc ttg 383

<210> 3377  
 <211> 384  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-067-Q1-E1-C11  
 <400> 3377

cccacgcgtc cgggtgggtg gtgaacagct tgggagacct tggaagtaag gatattatgc 60  
 aaggactttt attaagatcg cttttatttg ttcccgaaa tagtgagaaa atgttacaaa 120  
 aagccttgca ggctcgtgca gatgctttga taccagattt ggaagactcc gtaccgaaag 180  
 atgagaaggt cacggctcgt aacctcgttt ccaaaatggt gccttcgtta agaaacaata 240  
 ctccaaagaa ggttcagata attccaaggg tcaactcttt ttatacgagc tggtttgagg 300  
 atgatttaaa ggcagttctc caacctggga tatcncagta accattggaa aggtanaaag 360  
 tgctgaagag atgaaagaaa ttat 384

<210> 3378  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-C12

<400> 3378

gcaccgaaaa gtagtttggt tcaaccgatt gtacgggttg ttgaaagggt gatgcgtttc 60  
tggaagttgt ttttattggt tcttatgtct ccattggctg gtcgatattc accggtaaga 120  
ggatgatggt tgagggaggg gttttaggt gactgacac acaacaattg tgacaagggt 180  
tactggtgt tgaaaatatt gggtttggtg ccggaagaga ccgctaggat gtcgttggt 240  
gacaacacaa acacggtgaa tagggtacaa acgggacctt tggaagagtc gaccataca 300  
cataacgacg atcaggaatc caacttgta gttttttag atggaatgat tgtatgtagc 360  
tctggaaaag a 371

<210> 3379

<211> 335

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-C5

<400> 3379

aggaaaactt ggatagaaaa gcagaatact agtctttttg ttcaagtatc caacttgcaa 60  
ttatgaaaac aacgctatgg aattcgttta aaagaataat tggactctcc agtcttgcaa 120  
cctagaacac taacgcttct tcacaaactt actcacgatt attccataca gcacggaata 180  
ctagtattcg tacatccatt ggaactgaca gtttttggac ccagaaacac ttgtttgata 240  
ggaaagggtt caatattccg aaccgaaagt atttcctcaa accacgtcaa gacgactata 300  
ttcactttgg tggaagaagg gagtcggttt gggat 335

<210> 3380

<211> 319

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-C7

<400> 3380

acggttccgc gggatggcgc cttctctagg caaactttgg gtttatcctt cgggagtggt 60  
ttttctaggt gcagctgttg ttttgtatgg ttgcaacac gataaattgc cactagagag 120

agtcacggtt gcaaaaacct tttcaaagcc cgtttcaaaa gcagataatc aagttgttcg 180  
 agcaacaccg gaagaatgag attgtcttcc gctttggcag tgtatgacta gtggccaaga 240  
 cgactgttct caacttgaac gtgaactgag gctctgtatg gaacgaaaca aggtaagggg 300  
 acaacacaag cgcactgag 319

<210> 3381  
 <211> 367  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-C8  
 <400> 3381

agcccacgag tccggagtg cagaaaacta aagtttctga ctatcttgaa gaaaccttca 60  
 tggctgggaa cgaagaactg tccacgacag gcgcatcact gggggtcgcc tcttctattt 120  
 tgttaccxaa gaaattcggg gaagactttc ctttggagag ttctggcagt aaaatttcta 180  
 ggggtgtttt gagaccggat ttgatagacc tttggaatgg tctagtggat gagcgacaca 240  
 tgcgcagggt aaatatatta tctgctgcta gtgggttagg caagactata tatctttatc 300  
 tgatcgctgt ctttggccga cactttgaaa tcccagtgca gtatattgga aacacgagag 360  
 atctgct 367

<210> 3382  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-C9  
 <400> 3382

agcccacgag tccggcgaaa caagagaagg gaagtaaaag gtaagaaaat acgaggcgac 60  
 ctgggttttt ttccatccca cgttggttagc ttttgtatgt acactcgttg gttgtattgc 120  
 attgttgttg tttctattac aactggctat tgccaatccg caatatcgta gttggaaaaa 180  
 agagtggata gctatcgttg ttgcgtcgat aggtttggga gaaggattgc tatttacgtt 240  
 gatatacagt ggacaaagtt tatgaactaa ggttggtttt ccctggtagt tgaggacagg 300  
 tgaaatattt tcttggttgc ttgtctcact cgtcgagccc cttgttgtaa taaattgccg 360

ctagcctcca tttctttcgc

380

<210> 3383  
<211> 351  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-D1

<400> 3383

agcccaagcg tccgcagttt tggccttgtc tttgccaaac actcctctgg actcttcatc 60  
acacaactgt ccaaaattca tatttcagtc attgtatgca cacaatgagc agaagagtaa 120  
aaatattttg gagacatcaa gcaattatcc caatagaagc tcataaagag tattcctcag 180  
ccaaagttac cggagccagg catgggttcaa ctagctgcca gttcataacc gttgagattc 240  
cctctgatat cagatagttg tcgcgtgcgg atgggtttcca gcaagagatt atgttattga 300  
tcaaacttct gaattatcta tcagaaactg ggagtccaaa cgagagataa a 351

<210> 3384  
<211> 398  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-067-Q1-E1-D11

<400> 3384

gtgtgtcatg ggaagaagag gtggcagtg tgctgctaga agaactccgc taagggtcaaa 60  
acctcccctt tttgcaaaaa gagaaaggga agaagcaaca acgaaacagt cttcacgtcc 120  
tgcgtcttcg ctggccaacg tgaagaataa tcctacgagt ggaaacaaaa gagagaagac 180  
caaccaaacy acgaccctc caactcagaa gcctagtatg acctcttctc tttttggggg 240  
aatgctanga agtatgtcc ccatgttttt atttatgaac tgggttcaaga ggaatccccg 300  
ggaaagggaa ccagacaaag atgagatagc tcagaagaag tgtcagaggc ttgcgtgcaa 360  
tattcaagat tgtttgaaa aaaacgacta tcagcaaa 398

<210> 3385  
<211> 115  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-D2

<400> 3385

agcccacgcg tccgccgctt aagttcacga aaaattctac tggagacttt gtggaacgtg 60  
atccggtctc tgctgctgac gtgaaagcag gaaagtcctg cgttcaattt ttgga 115

<210> 3386

<211> 356

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-D3

<400> 3386

cacgcgtcag ggaaagtga gaacttacgg gtggatatgg atgccatggt tatttggaag 60  
ctactggaaa tcccaagagt gttgaacaag gtctctagat gattcggagc gatgggtgat 120  
ttggagagtt tagtgtagtc aaagacaaga ctgctgtgga gtggacgatt attggtgaga 180  
caaaggagtt gggtatacta ggagcacggt gcactggtga taatggatat aaagtagcta 240  
ttgatatgat tctccgtcac caaattcctg gtggtcgtat tggtactcac gaactaagct 300  
tagacaatat tattcaaggc attcaatatg tcaacgagtg gaaagagtcg attaaa 356

<210> 3387

<211> 362

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-D4

<400> 3387

agaggacatg gaaggaaggc gcagtatcct aagcaagtgt ggcaccctt tggaggcaag 60  
tttctcatc cgagggattg gaagaagcac acgaatatag ctacccttat tatggcactc 120  
actgtgatcc ctattagtta ctatgccgag aagcatactg tctattacca gtatccttat 180  
cataagattc cttggaggcc caatttgaaa acttttgatg aagatttgga ggagcgaaga 240  
aaggccaaga tggagaggaa gagtgttgca agcgatggtg atgaacagct cgattcgtag 300  
aacttgggaa aaaaggcatt ccttggtgtg ttaagtgtt tgcataaatg cacttgtcaa 360



ct

362

<210> 3388  
<211> 370  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-D5

<400> 3388

cccacgcgtc cgcccacgcg tccgcccacg cgtccgattc aacgaacgat gaagttccag 60  
tacgttagtc ttttattggc tctcttatgc gtaggttctg ctctggctgc tgaattggca 120  
cctggaattg cgaaaaaacc ggtagagaga ggatatgagg aaccctgctg taccgaatat 180  
tgttattggg aagaaatatg tatcacaccc acaccacac ctacaccagc ctactattac 240  
tattattacg caagagatgc aaaacaggaa aatgtcgaga gaagcgtaga aaagagtatc 300  
tcttcgcgag aaaaatctga tgcggttcga gggattttcc ccacgtacta ctattatgag 360  
actcctacat 370

<210> 3389  
<211> 355  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-D7

<400> 3389

agcggacgcg tccgcccacg cgtccgcgga cgcgtgggta tcccagctac ctgaagcaga 60  
tatgacgagc atttctcgac gccaaatgat tgccaagact tgcggtagcg atgggaggaa 120  
gagcaggaga agagcttatt tttggggatg acaatgtaac ctccggtgcg gaaagtgact 180  
ttaccaagc caccagactt gcagaagcca tggtaacgag gtacggaatg acggataaga 240  
ttggcaaatt tgtgttgggg agagaaacag agagtcccga aatgaggagt ctcatcgacg 300  
ctgaaatgaa aaagttgctg gacgaagctt acaatcacgc caagcaagtt ttgac 355

<210> 3390  
<211> 397  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-067-Q1-E1-D9

<400> 3390

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aaactcgaag actattttatt tcttgttatg ttttagagaa ttctctagac tgtgtttttt 120  
gggcttgta tacgccatgc ttggtggttg gtgattggct ctagagacaa agagtattgt 180  
tactttcccg ccattctcca cagctccaac caccaacttg tatacgcata catatacata 240  
accacatatt actcgagagt cgtggtgtaa aaaacgacaa ttcgaatggt tgaaaaggct 300  
tgataaaaag caaaggacta gtgaagggtg tagagaaagc acttganaaa gggggccact 360  
tccttgata tttgtgcccc tagtaactaa ctaattc 397

<210> 3391  
<211> 374  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-067-Q1-E1-E11

<400> 3391

aggtaggcat ttcgaagctt agcagtcctt gtgcgaagaa tgcatatcgc gtgtgtggaa 60  
aggaatgata tctattggac aatctgttga cgcgtgagac ggaagaatca cccatggttg 120  
gagatatgat actttgtgaa tatccatatg tcgaaatgaa gcgttggaac atcatgcata 180  
atctgagtga gcacgtcatt gaacatgggt tgcaatggga aactgcctgt ggtagccatc 240  
gttcttttcg ctttcacatc ttcgatagtt gtagtatcaa catatgagtt gcctctcggc 300  
gaatacatcg taggtttctc aatcctactc cttacaaggt gtcggtttcc cagacattgt 360  
ttgattttat ccat 374

<210> 3392  
<211> 366  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-067-Q1-E1-E2

<400> 3392

agccccacgcg tccgcccacg cgtccgggtg caaagaagaa aacatgtcaa agtttgcctt 60

gcctgcattg ccttatgact acagtgcctt ggaaccacat atcgacacta tgactatgaa 120  
cgtacatcac aagggccatc accaaactta tgtcaacaat ttgaatgggtg ccatacaagg 180  
ggaacatggg ggtcagttca aggggtctctc catcgaaaac atccagagga atgctgcaaa 240  
ggcacctgat gctatcaagg cagctgtgag aaataatggc ggtggtcact acaatcattc 300  
cttgttttgg acactcatgg caccacaggg gatctgcaaa tagtgcattc cactgtgagt 360  
tgaaac 366

<210> 3393  
<211> 345  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-067-Q1-E1-E4  
<400> 3393

agggctatgg gaaaagatta ctacgcaata ctaggcgtag atagaaatgc cgatgaaagt 60  
gctttgaaaa aggcttatcg caaacttgct gttcagtggtc accccgataa gaaccctaatt 120  
aataaagagt ttgcagagaa gaaattcaaa gaaatatcgg aagcctacca agtggtgtcg 180  
gacctgaga agaggaagat ttacgatgca tatggagaag aaggcttagc cgcacaaatg 240  
ggaggcgggtg gtgggtgcaaa tgggtgccccaa gggtttgggtg gattctcttc aagtgggtgga 300  
acaacattct tccgaagtac gttcaaagat ccggaagagt tggttc 345

<210> 3394  
<211> 352  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-067-Q1-E1-E5  
<400> 3394

agaaacgacc aacggcttat ttattgtcgg tggttggtgtt gggtgtgtgt gtgttcttgt 60  
catgtcattt caaaaagatg aagaaccaca cgattattta ttcaaaattg ttctcgtggg 120  
cgattccgga gttggcaaat ccaacttggt gtggcggttc accagaaatg agtttcacct 180  
cgactcgaaa tccactattg gagtggagtt tgctaccaa acatttcggt tggaagatgg 240  
aaagtggtga aaagcacaga tatgggatac cgctggacaa gaacggtaca aagctatcac 300

cgctgcctat tatagaggtg cctttggtgc tttgttggtg tactatatta cc 352

<210> 3395  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-E9

<400> 3395

aggaagatat ttcaaagctt actattcctt gtgccaagaa ggcatatcgc ttgtatggaa 60  
 aggaaggata tccattgggc gatttgttga cgcttgaaac ggaagaagca cccaaagttg 120  
 gagataagat actttgtaga catccatatg tggaaaggaa gcgttgtatc atcgttccta 180  
 ctcgatttga gccgttattg aagttggttt ggaatgggaa aatgcctgtg gagccatctt 240  
 tcttttcgct ttcgcatctt cgagagtttt gtaagcaaga aatgagttgc cttcggaag 300  
 accatcgtag gtttctcaat cctactcctt acaaggtgtc ggtttcccag acattgtttg 360  
 attttatcca tcgtttgtgg ttggaagaaa ctc 393

<210> 3396  
 <211> 387  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-F11

<400> 3396

agcttttttg actttggatt tgcacgtgtg ggtgtgctca gtcagaactg cttctcagtt 60  
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 gttacgcact aaagttgagc ggtattcggg tggacgtaga cggcagtttg gtcactatgg 180  
 tggacgcaga cgacctcaga gccctcatgt ttaaggaaag cctcaaggaa aagtcaaagc 240  
 tgcattgacc aaaatttttc aaaagctatt atgaggagaa taaggactac ttttattata 300  
 tgactcatag ggagaagaaa atgtttcttt ctctggaagt tgcacgagaa tacgctactc 360  
 tgggtgggaaa ctcgtttctg cagaaat 387

<210> 3397  
 <211> 363

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-F2  
 <400> 3397  
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 ctcccttttgt tgtgggtttt ggatgcaagg cacgtatccg taccgactgt cacttattgg 120  
 tcgtacactt tttcacaagt ctgccccaac ccactttttc aattatttaa gagacagtgt 180  
 tcaaaaagct agacagcaag aagtggatcg aaaacaattt gagttgttaa aaatacagtg 240  
 tgactatatt ttgcaagacc cgccattgaa tccaaacaac tacttagaac tgctgaaaga 300  
 agcaagagaa ctcttaaaat tcaaagggtt ccgcgaaaag tttgatgtag tgaaacaaga 360  
 ccc 363

<210> 3398  
 <211> 347  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-F7  
 <400> 3398  
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 atgaaaattt gccgtgtctt acttctggtc gcgatgccgt gatcgaaaac ttgaggaaac 120  
 gttttatgcc tggacaaact cgacatcaac gagctcaacg aatgatgaga cttatcgacg 180  
 aaagtatcga taattggcat actagatggt atgatcgata tcaacgtctg tatacgggaa 240  
 ttcattgaga tgtaatgcac aggttgtgga atattatatt cattttgata tataaaacgt 300  
 gtatgtatgg gatatatata tatagatata tatatatatg tattaac 347

<210> 3399  
 <211> 314  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-F9  
 <400> 3399  
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agaatcgccc aaagttcccg ttgcagtgat tttaaaagta ttttacgatg aagatttggt 120  
 tgaagaagat gtgatattga agtgggtatta ctctgaaaac agaggagtgg gaggaaaggt 180  
 tgcaaggaac aatgcttcta tgttggttga gtgggtggag aatgctgaat cagaaagtga 240  
 ttcttcagcc tgattgtgtt gttatgtgag tgcttgtttc gtgaaataaa agcgattcct 300  
 tgttttctgc accg 314

<210> 3400  
 <211> 288  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-G2

<400> 3400

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 gttggtgaac actgcttctg caggtttatt cggttatgat aaagagaaaa gcgagaacgg 120  
 gatgttggga agttcctgaa aaggggtctt gttccactgc cgttggttgg tggttggttg 180  
 ggaggttttg tggctatgaa aaagtttcac cataagacaa agaaacagag ctttcttcaa 240  
 aacgattatg cctgtgttgc agcaaatgtg ggaatgatag gattgggt 288

<210> 3401  
 <211> 361  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-G5

<400> 3401

agtctggaag tgtgctagga ataagcagga gaagtagaag agagtaggaa aagaagaaag 60  
 gagagggcgt aagacgtgat acagagtagg aagaaaagag aagagagcta gaaaggaggt 120  
 aaaagaagag taaaaggact agaagaggta cggaattcac gaggaaggag cgtgaaggaa 180  
 ggaggaatcc caagtaatcg aggaagaaaa agcttcggtg aaagcgtgaa cggattttgt 240  
 acacactgcc cgtcaagttc tggaagtgtg ctaggaataa accgagaacc ttacctctcc 300  
 aagaaggtgt tgcacggctg tcgaaagaac gtgctgtgaa gtgagagAAC gtacgagaaa 360  
 g 361

<210> 3402  
 <211> 365  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-G6

<400> 3402

gactccacca gtcaacgatt cggtgtcgct gctgaacacg tttatgacgt aaacgagaat 60  
 accaagttgc gttttggtgg gaaagttcct cacgggagaa tcggaccgg cacgatatgt 120  
 cactggccgg tatgacgtta cggtttccaa agaagatttt ccgataaacg ttcgtgcacg 180  
 tgcgatatgt ataagtaacc agtgcacgg cgatagtcgt gccaaaaaga agtttgaagt 240  
 ggacgaggac acttctttat tcttcttagc caaagcttgt actcaggaac taacaaaagg 300  
 aagttatatt attggtaaag ctggagtgac acgtgacttt cgtttgggtg aagacaactt 360  
 tccgg 365

<210> 3403  
 <211> 388  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-G9

<400> 3403

agccttgtgt gagtgttcct ggagtgaaga cgaaatatga gaatgtgaat gtcgttacag 60  
 ttcgtgagaa tacagaagga gaatacagcg gtttgaaca cgtggtgtat ccagggtgtg 120  
 tagaaatgat caaattgatc acgagagaag cttcgttgcg cgttgctaga tatgcttttg 180  
 aatatgcaa gaacaatcaa agaaaaatgg taactgcagt tcataaagca acggtgatga 240  
 aacgagcaga tggctctttt ttagaatgtt gtcgagaagt ggctcaagaa tatccgaata 300  
 ttcaatatga agaattgttg atcgatacat gtgctgctcg cttggtacag aatccttcgc 360  
 gtttgatgt catggtgatg cccaattt 388

<210> 3404  
 <211> 223  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-H12

<400> 3404

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cggcgacaca caaccgtaaa tgctgactct caggtcgatg acggggagta catgacgaaa 120  
ccaagatcac cgaagcccgga gtactatatg gagtactgtg tctgcaagca tgcacgtatt 180  
tctaccagat agtgtaaacc gcgtcccttt tgcataatgt ccc 223

<210> 3405

<211> 381

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-H2

<400> 3405

cacgcgtcag ccttgcaatc gtatcttctc gttgctttga ctgccaccgt tgccgctggt 60  
tttacaactt tagttacgag atacaagcat gtatttagta tgttgagagc tagatggttt 120  
agggacgtgt ttgaagattt gcgcttaaga cttcgagcaa gtgaagccgc cgccataagg 180  
gagagattgg acttgctaga agctaaaata ttgtcttcaa gcaacagcag tagacgttct 240  
gtgcattcgc ctcgtaact tgcagaagag aaacctattc ctgagtggga tctagttacc 300  
agagaagatt tcgttactct tcgaacgaga gtagatgac tgtccaaaga gttgactagt 360  
atcaagtccc aagctgacaa g 381

<210> 3406

<211> 392

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-067-Q1-E1-H4

<400> 3406

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cctttgtttc tcaaaacata ttgaaagctt ttgaatgtgt taaagagact gatttttctt 120  
tatttttgtt ttcgtgctat aatttgttta tgtttctgtt ttgtcgcctt tcttctattt 180  
ctaaaggaca agcctttgaa cacgctgtgt tgttgtatct ttctacttg ggtttttgca 240



tacgtagtac tggaggagtt ggtgacgggg gtatcgactt tçgtggaact tggaaaccta 300  
 ataaagcaat agagcctgta cctgtcgtcg gtcagtgtaa aacattatca agaaaagttg 360  
 gtgttcacgt tatcagagag atggaaagaa tc 392

<210> 3407  
 <211> 396  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-H5  
 <400> 3407

agcccacgcg tccgcagaga ccttccacaa atgacatgaa tgaagcaagt tgctttccgt 60  
 aaattgaaag gcattgtatt acataccaag tgtgttgtaa gacttgagtt actgcacatg 120  
 ctçctttgga ttgttgcttc cgacaccgtt ttgagtaaaa acttccgaag taactatctc 180  
 ttttcttgtc cacgaagact tcaaagggcc aaaaacattc gtacttttat tgctgcctca 240  
 ctatcaagag tatttgtagg aaactctgtt ggttccacag tgaatggcac tcacgttaca 300  
 aatattcatc caggaatggg tgtacacçtt gaagaagagg aaacacaaca tctgagagct 360  
 cgtcgaatag aagaaaatca agtgttggag gttttc 396

<210> 3408  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-067-Q1-E1-H9  
 <400> 3408

agaggatcca gttcçttata gtaatagagc agctactttg accaaactag gacaattccc 60  
 ttctgçttta gcagattgtg aaaaatgttt gcagctagat cctcaatttg taagagçtta 120  
 tgccagaaaa ggtgçtattc atttctatat gaaagaatat cataagagtt tggatgcçta 180  
 tcaacaagga çttcaagtgg atcçtaataa tgcagaattg aaggaaggat tgcagaaaaac 240  
 tttgagtçct attgcagaac aacaacçctc cgagaaacçt gatgaagaac aatcaaaca 300  
 tgcaatggca gatçctgaaa ttcaaaagat attgatggat cctgtattac aaaatttggt 360  
 acaagaagcg caatcaaatc .c 381

<210> 3409  
 <211> 435  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-068-Q1-E1-A2  
 <400> 3409

aaagaacaac gaagcatttc tgattgtcaa ctatccaaag gacgagatga gttgggacaa 60  
 cgatggacag cgcctttgga caggcaaaga cttttagtaa tatgtcaagt tgagatgggg 120  
 aaatccttta tttcgtagaa attgctgttg gtatagtaca ggcagtatag tatcttgtga 180  
 cactggaaag gttttacaga gttgggtttc gtgtgagttg ttgagatcaa tagtacgatt 240  
 atttaggtcg ttgcactgct tgaagggtta gaattaggaa tggatgaagag tatatcccaa 300  
 ccatctagta atcaagcaac agtagaagct ctagtttctt cgaaaaaact gtattttctc 360  
 aaggatccag taacangaaa gtattggacc gaacgagatt ccaaacgagt aaatccacat 420  
 gtttatcctc aaaaa  
 435

<210> 3410  
 <211> 274  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-A3  
 <400> 3410

cgctccatg gaaaaaaaaa aaaaatcaga atgataaaaa aaaaaaaaaag aacaaaaaaaa 60  
 ataggaaaaa aaaaagaaaa aaaaatagaa aaaagcaaag actttgtaaa aataaataaa 120  
 attgggggtg gggaaaatca tttaattcgt aaaaaattgg tgttggtata ataatcgca 180  
 ctatagtatc agtgtgacac tgggaagggt ttacagagtt gggtttcgtg tgacttggtg 240  
 agatcaatat taggattatt taggtcgttg cact  
 274

<210> 3411  
 <211> 372  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-A6

<400> 3411

agcaaaacaa caacaacaac aacaaccgtc atcatatctg aaacaacacg tactccacga 60  
acatcgagct tgggtcgttc tttaactact tgtactatta aggaacctga cccagtattt 120  
cttagttctt cttttcctcc ataacaacaa tgaaaaaac cagcagatgc ttctcgttgg 180  
ttggaaataa aggtttggct gaattggaac gtatggaaaa ttttcctttg cgtgaataat 240  
aaagttgttt tcaacttatt tcttggcata taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaataaaa aaaaaaaaaa caaaaagaaa aaaacaaaaa tagcaggaaa aaacaaggac 360  
ggtgctaagg at 372

<210> 3412

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-A9

<400> 3412

taaaataacg ggtaaaacca aacaaccggt taaaattcg ccctttctaa aaaaatcttc 60  
gacgcacagg gatatgaagt tcccttcaag gtggagccca ttgatgagta ctgcatccaa 120  
caactcaagg aatacgatgg aaataacccg gtttgcgcta tacaggaagg tctgaaattg 180  
gacgaaacat atgaagataa catagagaat gaggaacaaa agaagtcttt cgaacagttg 240  
ttcactgtta ttaacgaaat tcttggagac aaagtggaga atgtggtagt ttccgaaaga 300  
cttgcggaat ctccatgtat ccttgttacc ggtgaatttg gttgggt 346

<210> 3413

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-B1

<400> 3413

acgcgtccac ggacgcgtgg gccaatctt caaaagattt tccttcactt gcaaactatt 60  
ttacatcttt gctacatacc aagtgccatc ctgctgcacg caaaccaaca taaaagactc 120

gaagcgacag ggaaatattt actccacttt tgcgtgaacg ggtttttagtc atcctgggttc 180  
 ctccccagac cctcgtcttc caaggaaca atatcctgga agtcgggttt cgagtcacatca 240  
 ggcatatttc tgtactctgt cttttgtcgt agcacatttg aagccttgtc ttgtggaagt 300  
 aatccttctt cgaaaagtgt acgaaaactg ccttgccaat gtttgcgtt attatcacta 360  
 agataacggt gatgatacac agaagatgct tgaatttccc ttttaaaact 410

<210> 3414  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-B2

<400> 3414

cccacgcgtc cgcccacgcg tccgcccacg cgctccgcca cgcgccgcg gacgcgtggg 60  
 tgggtgttga acagccactg ttttgaaagg tctgggggttg gagttgcttg gttatgatgt 120  
 gtttcctaata caagacttta agaatttggg tggtcgatat gtggagttga atgagttgct 180  
 ttctcagtcg gatattgtga gtttacattg tccattgaat gagaatacca aacatctcat 240  
 ccgtgcagaa acgctttcta taatgaaacc tggagcttat cttatcaata cgagcagagg 300  
 agctttgatg gatacgcaag cagtattgga tgctttatat tcaggacata ttggggcctt 360  
 ggcaaaggat gtatatgaag gaaaaggaaa cttgtttt 398

<210> 3415  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-B6

<400> 3415

ggccgaccca cgcaaccacc cacgcgtccg cccacgcgtc cgggagaaga gagaggaatg 60  
 ttggcggttcg tgtatggaca aggcggttgt atactacaac aacagcaaca acactcttta 120  
 caaacaagaa ggtgtttcct aggaaccaa aactattttg tcgggaagaa taatgctact 180  
 gggaaaaaca caaaaacagt agttttcaaa agacgaaaac aggtagtagc tgtacagacc 240  
 agtcatgtcg acagtctagg ttgcacgagg gaccagaaaa agaatacaagt tgagtttacc 300

caagttcctg accagagagg acacttttgt agatatgggg gacaatttgt tccagaaact 360  
 ttgttctttt gtttggaata ccttacaaag tgtttcgagg aaaccacaga c 411

<210> 3416  
 <211> 397  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-B9

<400> 3416

tttcttgtgc aatattcatg ctgttggtgt catccgtcaa ctaacactat attgattttt 60  
 aatggaatag cattttctta gaatccattg gacagacact cctacacgag ctggttatcc 120  
 aaaacaagat gtgcccttct accagtgtc atcatcactt gactcatagt gaaacccaaa 180  
 agcttcgttt tcccacgttt gtagatctcc acgttctttg gatacgagca catactagcg 240  
 atattcaact gctccaacat gtccttatcc gttagctgtt gcaaaccacg ttcattctaca 300  
 atgcatttta atgagccacc tttttccaaa atgaatcgaa ggatatcatt cgcaattctc 360  
 aactgagtg tcatattttc aatgacggag attattt 397

<210> 3417  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-C1

<400> 3417

aaaaaatgt ctgctgaacc ggtgggaaag ttaaactctg gtgcaactat tcctcttcgt 60  
 ggctttggaa cctggaaagc tgagcctgga gtggttggtg aatgtgtgaa aactgcttat 120  
 gacgtcgggt acagacactt tgactgtgct gctatatatc agaataaaaa ggaaattgga 180  
 caagcttttt cagaactttt ctccagagga gtgaagagat cagacatatt tgtcacttct 240  
 aaagtgtgga atacctgcc aagtcctcaa agagtggctg aagcttgtaa acaaactctg 300  
 caagatttac gtctggatta tctagacctt tacttggttc actggccttg caactgggag 360  
 tttatgggtc tgccatttac tgcagataac tggattccta atgataatga tgggaacata 420  
 aagttttcc 429

<210> 3418  
 <211> 358  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-C11

<400> 3418

acgcgtccac gatccgtcga aatattcaag ttgatatcca catacacagt ttagataga 60  
 tatgtatatg ttgaaacggt ccatttcctc tagttgtaag ttatacagtc aaattctaga 120  
 ttctccaata cgttgtctac ttgttggttc cactccgagg cagtcccatt gggtttgtac 180  
 gtctagtcca cgagatgggg aagaagagga aagcagcgtc gactttgtca agtcttatca 240  
 gaaaaagttc cgatcctctc attctccttt ttggatttg gaagaggaag gcctgaaaca 300  
 aaaggcttct gaagacagaa aagctttggt gagagagttt tacaaatata cagttttt, 358

<210> 3419  
 <211> 401  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-C3

<400> 3419

agcgagcgaa acgcaatctc acggtttctg taccgacaat cgatgaacaa cttcatctgc 60  
 atcaaagtgt caaaagaggg ttctgtccag aagaagaagt atacatgagt caagttaccg 120  
 ttggatcaac tcattttatg cttccagatg aaagaaatat gtatggcttt acgtttggag 180  
 gagttttaat gcgaagagcc tacgaattgg cttctgtcaa caattatttg gcgtttcaac 240  
 aacgtccaac ggcagtagaa gttggagata ttagctttat caaatctgtt ccagtgggca 300  
 gcattttgga actgcattct tctgtagtgt atacaaaaga tacttatcaa gtagttttag 360  
 tggatgcgat ggtgaataat ttgatgcacg accctccaac c 401

<210> 3420  
 <211> 418  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-C4

<400> 3420

acccacgcgt ccgattgttg gcaacgacaa gagatgcgcg gctggtggct atggagtttg 60

ttgttgggtct gtttgtgttt gttcccacta tccaactccg ttcaacaaga tgaagcgttt 120

gttcttattg gtcctcttcg tgaaaaggat gagcacgcaa cacagccttc acaacctgtt 180

gtaaagccac atggttagcaa aacttggaag ccgctccagt gtactcccaa caaggaaaaa 240

gcagaggcat tgatacaaaa ggcacaaaat agtttgagtg cgcttttctc aaaccggttg 300

ttcaagcata tagacgtcga aagttgtcaa gagtttagag tggtcgaaat aaagcttgac 360

gaaaaagggt tgaatttga taatggacaa gagcatatca aggaaagctt tagaatat 418

<210> 3421

<211> 426

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-C9

<400> 3421

acgcgtccaa gaaaatggaa tttttcaatc aaaatggttt tcgtcgtatg aagaatactt 60

gtttggatga tggctgccgt gcaactaggc agaacaagaa ttgtgagcgt aactatccaa 120

atgagaaatc ctatgcagct tccaagaagc acatatgtaa agaattatctt aaagggtgata 180

acaactcgtc ttcattccag aaagaaaggg ataccacagc tattcaaaca caagaagcaa 240

ttatggagca cagatatcat tcaagtaacg acctttcgga ggagagcggg catctaagaa 300

cccaagatac taacgtgaaa caaatgagc tggcaaggta tttagaggaa gaatatcaag 360

ttgcaaagaa caatgtgaca gaaaaagtgg atgactcatc aactcgttgt tctttggcac 420

taatgg 426

<210> 3422

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-D1

<400> 3422

agttaccttc acttgtgggt gggattgttg cgcaatgttc aagtcgctag cttttatttc 60

catctatttg aaatatccac gctgcagtag ctcggtgcaa acaaacgcag cacgaacaat 120  
atggaaacct ttattatcaa cgtatcaaca gagactttat tccggaatgt ccgttgatat 180  
tcggtgggtc acttacaaaa accgaaagtc gtacacttca agtatactaa gtttcaagtc 240  
ttcctattcc acacaaggag gagacacgga gggcaagata cctcattcta aagatatgaa 300  
aggagaacct cagtccgctt cagatgctta cgacaagact tgggctaaag aaaacttcaa 360  
agacacttct gaaaatgcag actccgacag ttccaaaatt tgggagttga aactacgttt 420

<210> 3423  
<211> 307  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-068-Q1-E1-D10  
<400> 3423

acgcgtccac cagcgtccg taccatcgta ttccatttca cattcttctt gtagaaaact 60  
atgaagtctt tcggaattgc tattgttttc ctaagctttg ttattgcac ttatgcagca 120  
gttggtgccg aaatggcatc caatgagttt caaagaggag gatacgctcc ttctccttcc 180  
aaggaatgct gcatgaccac ttgtcaatat gcagaacttt gcccaatttc tcaaccaact 240  
tatagccaag ctccatctta cattccatct cctacctatg gccaaagctcc gtcctacaat 300  
caatatt 307

<210> 3424  
<211> 348  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-068-Q1-E1-D12  
<400> 3424

atgaagatat ttcagtttaa cgtggatatg taaagcagct gttcaggtgg gggtactttt 60  
attatactct agcagacact ggaaccaatt attttcgccg ctttctgaat cttcctatgg 120  
aaattgttcc ggaagctaga aatcaacctt tcagattccc tgggtgttcgt tctttgtcgt 180  
ttccacaaga aggtcaagga tggagaatgg atctggaaga ggagacttcc gacgcgaatt 240  
tcgtggaagt tttggtggat gaaagggatg ttattgtact ttagaagatg gtccttaagc 300



attgttttgg caaccataaa gatttagaaa cttctattac caatcaag

348

<210> 3425  
<211> 431  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-D2

<400> 3425

aggcaactgc agtgggaagga aaacaagaaa cagcaaagga caccaagttg aagaaggcct 60  
ttgacctcaa gtcattcttg aaggacctgg cagctggagg tgtagctggg gcaatctcca 120  
agacggcggt cgccctatt gaaagagtga agttgctact tcaagtgcag tattcaaattc 180  
cgcaaattcc ggaggagaaa cggtataaag gcatcatcga ctgttttaca agagttccaa 240  
aggaacaagg gtttatttct ttctggagag ggaacatggc aaacgtcatc cgttactttc 300  
ctacgcaggc ccttaacttt gctttcaagg acaagtacaa cgccatattc ttggaaggag 360  
ttgacaagaa taagcagttt tggaggtatt tcgttggcaa tcttgctgca tggggtgcag 420  
ctggtgggac t 431

<210> 3426  
<211> 426  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-D4

<400> 3426

aatcagggaa ttttgtccga gagttgtagt ctccgtcatg tcttcctgtc ctccagcagc 60  
ttctttcttt gggtatattg gtgctgcaag tgcccttgta ttttcaaatt tgggtgcagc 120  
ttatggtaca gcaaagagtg gtgttggcgt tgcttcgatg ggtgttatga gaccggaact 180  
tggtatgcga tctataattc ctgtagtaat ggctggtgtg ctaggtatct acggtctcat 240  
cgttgctgtt attttggttg gacaaattgc cgaaacgaac tatccatatt ttcttggctt 300  
tgcacacctt gcttctggac tagcacacgg tctcagcggc ctggcggtg gaatttgtat 360  
tggtatagtt ggcgacgcac gcgtccgagc tacagctcag cagccaaaac tctttgttgg 420  
aatgat 426

<210> 3427  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-D5  
 <400> 3427

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 ttggcacttg gaccactata gtaatggtac ttgctattc tttggaaact ccaatcggtta 120  
 tatctattgg tattggtatt gcacacactt atcaggaaaa ctctcgggca tctttgttaa 180  
 cgagaggcat ttggatgcc atctccggtg gaattttaat atacacagga ttggtggagt 240  
 tgttgactta ttggcttacg cgcaactcga actttttaag acgcaaagcc atacctattt 300  
 ttagtattgt gggatttgtc tggtaggag ccactctgcat ggcgattatc ggagcgtggg 360  
 ccttagaata aaatttggtt gagacgtcgt ggtgcacatg actcgcattgt ttggtagtgt 420  
 gttc 424

<210> 3428  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-D6  
 <400> 3428

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 ggacaagtcc aaacaagaac aaaaagctcg ctggaatcaa ggagctttat ccacgtggac 120  
 cctgtggaaa aaaactcaag tagaagatac tccagcaaag ttcttcctag gcctagtacc 180  
 tattcgacca ggagtgaaaa tcttagacct tgctgtggt agtggggaaa cctcccttca 240  
 agttgctcac ctagtttcca gccacttaaa ggatgaagcc aaagacgcaa agatagtttg 300  
 cgttgatatt tcggacgaaa tgcttaaagt tctcaaccaa agagcacagg aaatggggct 360  
 agcaaatatg gtggaaaccc gctgtgagga cgccgagaag gtcgactttg gtgcgcacta 420  
 ttttgatat 429

<210> 3429

<211> 415  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-068-Q1-E1-E1  
  
 <400> 3429  
  
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 cgcttccaaa caggcgaaaa caaagcaacc gtagaagcaa aactactgga aatgctacag 120  
 agcaaaagag tccttttttg tggccattta agttttaata ttgttattct agttttgtcg 180  
 acgaagttcc ttaattacgg aggcaagagc gtaggggtcg aagccttggt ctaacaactc 240  
 tatcgccact tgtagagttt ctctgtctag tcccgtttcc aaaagtctcg ctatttcgta 300  
 cgaaactaaa gactcatgaa ttttttttTc ttataggata taatgcctta ctttctaata 360  
 tttcgTTTTt cttttcctct cgttgtcTaa aagacaattc gcgtgtctcc aattt 415

<210> 3430  
 <211> 171  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-068-Q1-E1-E12  
  
 <400> 3430  
  
 aagattccgc tggcacgtat accagatgag atgtgagtc agcagagcca tgcaaagtga 60  
 atggcgctgc agttacatcc aaaatgtaag agatgaattt gtgcagaaga gagggccaaa 120  
 gtgtgtcaag tcttaccata atgggatatg ttttattcaa aagctctcca g 171

<210> 3431  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-068-Q1-E1-E2  
  
 <400> 3431  
  
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 tgctttgatt aatatgcaca gtccatttct agatgttaac tgctacagtc tagttgtaga 120  
 caatcttttc agcactcgct gactcatagt atatttgcaa tcttttatcg actccacctg 180

acctcccag gttctgcaga ggttaccctt tttatcgaaa caaaatgatt tttcgagtag 240  
 tgaatgggca ttttaactgt ttctgttgat agacttgagt gttgaaagat tccgcagttt 300  
 gtcttattag atacagcttg acaattttgc cggaagtctc aatacgtttc aatgttatcg 360  
 actacaatat caatttatcg tgagatggta tgtaaaaccc agtgtttttt a 411

<210> 3432  
 <211> 253  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-E3  
 <400> 3432

aaccacggt ccggaacaag ttttatcggt gctggcagta tatatcttca tcgatggatg 60  
 tatatatccc aaattttggt tctcttaaat actgtgcac gatatacttg gttcgtatga 120  
 ttggatatag ttgctttggt ttgctacaaa atacggagag aataaataat agatgtgatt 180  
 tccaataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaacaaaa 240  
 aaggaagaag atc 253

<210> 3433  
 <211> 379  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-E5  
 <400> 3433

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 ctaccaatac gattgttcaa gtctttcatg accgtcaagt tattcatcga gaattgattc 120  
 agcaagttca tcattctagt gcaagtcata ttccactgac tggggttgct gcagtctatt 180  
 accgtaataa atctagtatt cgactagcag ctctgtcttc aggtcaatat acgattcaag 240  
 ttttgagcat ttggctaacc accgcataaa tgatatgatt ggaataagaa cgaattcctc 300  
 aatgttaaaa tgttgtcacg ttgtaggaaa tatatttaca caatagaata ctgctctcct 360  
 cattggacga ctttgtatt 379

<210> 3434

<211> 383  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-068-Q1-E1-E9  
  
 <400> 3434  
  
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 gtcaaaaagt accaggactc cgtggactgt acaacttttt agctcgctg cagataagag 120  
 gtgtagaaag agaattgcgc aagtactgac tgagatacga tgaccttctc aacgagcaag 180  
 atccgatgt gaaaaaagct cttgaaatgc tcccggaaca tgagaagcag ttgagagcca 240  
 agcgttttat tcgagcgttt gatttgtcca tgaagaagac tcacttatcc gatgaaataa 300  
 caaaaagga agatatgttg aacccatatt tgagaagtcg catcaagctg attcgtaaaa 360  
 aaaagcatcc aaattgagac tta 383

<210> 3435  
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 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-068-Q1-E1-F1  
  
 <400> 3435  
  
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 ttcaggatcat aagaaaggaa atggatgatg aataacttct gtttcattta gtcctcgttc 120  
 tccttatcgt attgcaactg gttcgttga aaagacagt agagtattcg atgtagagac 180  
 cggatgaactt ttgcacaatt ttcgtcaaca tgcagattct gtatattctg ttgccttttc 240  
 gagcgatgga agatatctgt tatcaggttc acttgataag aatgttatat tatgggatct 300  
 tgcagctcct tctccaaata actatacaat tttcaaaggc catactgact ttgttttgtc 360  
 tgtcgcatth agcttagacg gtcgtcttct cttgagtggc agcaaaaacc gtactgtaac 420  
 tttctggg 428

<210> 3436  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-F12

<400> 3436

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tacgaaccag gactgtagta actggcttga gcaagggtgtt tgttcaagta tagttattgt 120  
agttgtagag ggttggtgaa ataaagggga ggagttgtga gacttaaatt cctatcaacc 180  
gtaaccgagg gaggaagggtg tctttctgac agtggacttc agtggccgca ggtaaggaga 240  
gttgacaggg aagttggagt taagtagcgc agtgtttcaa gttttcgggt tggtttcgta 300  
caagtaacgg cactgctcgt acaatgggaa ttcctctgac ctgtcatggc caagtacaag 360  
cgccgaaaaa gggaacaagc ttatatgtgg agttgtgggt cacaga 406

<210> 3437

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-068-Q1-E1-F3

<400> 3437

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tcaagttttg tgtttccttg ttgtactaga tgtgtaaaca ataccagttt ctttcgtttg 120  
tttttcaaga cccgtccaac tagtggttaag tcaactgtcgt tactggcggt agggacaggt 180  
tggaatagaa ggtctttgct caagaccatc tctgtcttg ctgcttttcc cgtttttcgt 240  
atttttcctg ttcagtcagc gaataatgaa gaaattgtcc ttcccgatgg agtccgtttt 300  
tggttggtga aaaaaggat cggaaaagca tatcctgctg tanggtaaga agatatctat 360  
tacgttttcc tgagatatca agtgtacaca gcgaacttgt t 401

<210> 3438

<211> 366

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-068-Q1-E1-G1

<400> 3438

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aatggttaca tttaaacccta taaaggactt aaaaccggga atctgcaagg aggagaccca 120  
cattggaatt gccaaaaggt ccaagcacta aaattcacca ttggggaaaa ttgggcattg 180  
ttcaggggaat tatgacccat ttatgaggat tggattaatc agacaaggaa tttaaaggag 240  
ggaattaagg gaatttttgg ccaaaacact ttccaccacc accggtaaaa cttttgttcc 300  
aagcttaaac ccacaaaact ggggtgtaaag gtccattctt aaattaattc taaaagggaa 360  
aggaaa 366

<210> 3439  
<211> 451  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-068-Q1-E1-G10  
<400> 3439

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gaagttgaga aagaaggcaa tccaaaatgg ttagtgcttc atatggtgtt tactggaaat 120  
cgaccttcct cgtgtctctt gatgcctgtc ttagacgcgt atgttacggg acaacttttg 180  
gcgctttatg aacatctcac agccgtgcaa ggattccttt gggagattaa ctcatattgat 240  
caatttggag tataattggg aaaagtcctg gcaaataaag ttcgcaagca gttgaacgaa 300  
agcagatatt ttaataaaga tatctcaggg ttcaatccct ctactacaag tctgctcaat 360  
cgatacttgg aaggttctgt angatgtgct ttcgaacatg tttatcatta tgagtagttt 420  
gtttcgtgtt ttggtggagt tgattttttg a 451

<210> 3440  
<211> 388  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-068-Q1-E1-G11  
<400> 3440

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gattggacag ttgattgagt gtcttcaagg aaaagtttct gccattgctg gaagagaagg 120

agatgcaact ccctttactt gggttacggt agatgaaata tctcaacagt tgaaagcttt 180  
 gggttatcaa agtcgtggat gggaacttat gtataatgga ttgacaggtc gaccgttgga 240  
 agcgcatata ttatttggaac ctacttatta ccaacgacta aaacatatgg tcgatgataa 300  
 aatacattct cgtgctcgtg gccctgttca aatactcaca agacagccgg tagaaggaag 360  
 agctagagaa tgtggattgc gcttttga 388

<210> 3441  
 <211> 415  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-G12  
 <400> 3441

aagaaagatc tgcattgatt ggacgagttt tgccatttgt gtctttcact aattgcatga 60  
 ccgttgcggt tcatagtccc ttgaacaccg ttattctccg tttgtgcagt agcgtaggtt 120  
 gtggaagccc cagaagcggt ttgactttcc agtcttcttt tcaactgctga agcggtggcgc 180  
 gtactttgat actgttggtc accttggagc gcactattga aagccacgtt acatgttttg 240  
 caataagtgt cagtgtcccc ctctaactgc tgtgagaatg gttatggaac ttgttgcttt 300  
 tcatactttt ccttttcggt aatgcgaatt acatgagaag ccgctcccta aaccattacc 360  
 tcagttctgc aaacggaacc aacttacaaa acttacagct cgattgaaag ttttt 415

<210> 3442  
 <211> 396  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-G2  
 <400> 3442

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 gttgaagcat tccaaggctg ttcccgggtg tggtgctgta gaaatggagc tttctaaacg 120  
 tcttcgagaa tacgccagaa ctattcatgg caagtcgcaa ctgttaatct cgacttttgc 180  
 aaagtcgcta gaaattattc cacgaacgtt gtgtgagaat gcacggtttg atgcaacaga 240  
 cattctgaac aaacttcgag cgagacacgc gaacaatctt ccctatgtag gcattgattt 300



gagcaacggc gaaatatgtg acacgtggaa aagtctcgtg tgggaacctt cactactgaa 360  
gtcgaatgtt ttatccgctg ctacagaagc tgcattg 396

<210> 3443  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-068-Q1-E1-G3

<400> 3443  
  
accacgcgt ccgaagaaaa gaagagaaaa gccgtactga agaccgacac aggtactcga 60  
ggagaaagga gacccaaatt aaggtgagag aatggacgat aaggaactag gcaaaaggat 120  
atggtatctg cggtagaaca tatgaaagaa gcagcaccga ctgttttagca aaaacacagc 180  
actctgcaga aaagagaaaa tgtaaagtat agagtgtgcg gcctgccaaa tagtagagaa 240  
gaaatcgatg aaagtgaag cgagtaaaag atgaggtata gagaatggcg gtcctaacag 300  
taaggatcca aaggtagcga agtaaataga cgtttgaaaa gcgttcagta tganaggaga 360  
aacgagtgtg gactgtctg gtcgtccaac tcaacgaaac aacaataact g 411

<210> 3444  
<211> 421  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-068-Q1-E1-G4  
  
<400> 3444

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caaagtggag atgttggtc tattggcttt gaaatgtata tgaatatatt aaaacagact 120  
ttggatcgac ttggaggaaa gaagattcct gttttgaaag aatgtgaagt agatgttgcc 180  
ataccaagtt atataccaga gtcttatatc aagatagaat ctgaaagaat ggcagcttat 240  
cgaacgttga gtcgagtcac cagtttgaaa gaaatagatt ggatatccga tagttggaaa 300  
tacaatatg gcgacttgcc tctctctgtt tcttttctac ttgaaataac caaaatccaa 360  
ttgttggtc caaaggttg tatatctgca atacaaatag aagaagagtt tgtgcaactt 420  
a 421

<210> 3445  
 <211> 446  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-G8  
 <400> 3445

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 aatcatgtcc tactacacac attattctac agccatagat atgtggagtg ctgggtgtat 120  
 atttgctgaa atgctcaatc atggaagacc gctgtttcca ggaatgaatg gtttccatca 180  
 gttagacctc attacgaaga tattaggaac tctttcacca gaagatttgc aacatgtaag 240  
 gaacccaag acgaagcagt atttgcagtc tcttctaga agagcacgaa aacctttttc 300  
 ggaaatatcc gtgggtgcgg atccccgtgc tttggcgtaa ctggaacgtt tacttcagtt 360  
 tgatcccacg aagagacctt gtgcgaaaga agcattgcaa gatatttatt tccgtgattt 420  
 gtatgaggcc gactgtgaac ttgttg 446

<210> 3446  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-H1  
 <400> 3446

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 ataagagcac tttgaaagaa gcggacgaga agctgcagag tgcagttcat agtggaaacag 120  
 agaaagtctc tcaggtgttg agcgacgtca aggaaactgt gacggagaaa tacaaggaat 180  
 ggacagcacc aaaaagtagc caagaagaag cacaagaaca agcacaagaa gcgaaagaag 240  
 aggctaataa agcttttaat gctatgacag acagtgcgag tgccgcttca gaggctgcat 300  
 cagagaaagc agaaaaaatt aagcaggagt tgaacgagtg aagatacaca gtagtcttct 360  
 cctataatgt tcttag 376

<210> 3447  
 <211> 419

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-H2  
 <400> 3447  
 agtgaaatga aaaacggttg tccttgatga aaaagtgtca acttccggtt ctccctgaag 60  
 acgttgaatc tcaaattctg gaattattag agtatgtaaa ggatgttgct gttgctagaa 120  
 tggtttgtaa gcgatggaag agactcgtgg atgaaaattc ccaattgtgg agacgacttc 180  
 aaggctttac actacaaaa cgactgccaa gtgaagcgga aaagtggat agaaaggcag 240  
 cggaatgtgg gaatcgagag gcaatgggtgc ttcttgctt gctctattat tatggatattc 300  
 agagtcagga tgccacagtt ttgtctttga cgtttcttcg aaatagtgtc gcttggttagt 360  
 gcaacgagca ctagtgtcgt tggtgaggtt tttataaata aataaatttg tccttggtg 419

<210> 3448  
 <211> 107  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-H4  
 <400> 3448  
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 tgtttggttg ttgtagtacc gcgcacctag taaagatata tacatgt 107

<210> 3449  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-068-Q1-E1-H5  
 <400> 3449  
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 aggtttacga gagaaggaag tagaaagaag agagtgtgag gcggcgatcat aatagaaatc 120  
 cgaaaggagt agaagaaaag agagagaaga aagaaaagaa gagaaaagcc gtactgaaga 180  
 ccgacacagg tactcgagga gaaaggagac ccaaattaag gtgagagaat ggacgataag 240

gaactaggca aaaggatatg gtatctgcgg tagaacadat gaaagaagca gcaccgactg 300  
 tttagcaaaa acacagcact ctgcagaaaa gagaaaatgt aaagtataga gtgtgcggcc 360  
 tgccaaatag tagagaagaa atcgatgaaa gtgaaagcga gtanaagatg aggtatanag 420  
 aatggc 426

<210> 3450  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-H7  
 <400> 3450

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 agtggataat atgttacagc gactacacaa gctgacgagt atcttgtcct ttttatactc 120  
 gggcgaacaa ccgagagtgg actatatcgt tgctgaggat gaagcaagtt gggaaaagtt 180  
 gtggagagga aaacgcgagg tcattggata tacttttgaa gcagctttac agaaaacttg 240  
 tattgtggaa aaccaattga gggagtggaa aaagaaactc gatagtctag cagacaatta 300  
 ttcgttgggt acgagagcct atgatgcgag aatgtgggtc ttggacctca tcgcaactat 360  
 tatgagtgtc tgttttgcag tttttggaat gtttcacaat tctttgggtt ttatgtccaa 420  
 ttgcccc 427

<210> 3451  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-068-Q1-E1-H9  
 <400> 3451

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 tctcgataaa tgaaagtaag tgtatgcagt tgggtattga tatgtaagag tagagcagcc 120  
 ttagttgata gagaacggtc ctgggatgag agcaggactg agagtgtatg aagactttat 180  
 tattgtctgtg gatggcttga ttgtcgagga agacgaagat gagatatctg aatattttaa 240  
 gaagaaaaca ggacaatatg tcaagctagt ggtttggaac tgtctggatg aagaggaaag 300

agaggtttcc ttgttggtca acgagccaac taaggagagt ggtagttgg gaggattgt 360  
acgatatgag tcacttttcc acgctacaga atatgtctgg caatgtataa gtgtcgt 417

<210> 3452  
<211> 152  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-A10

<400> 3452

tcgagccacg cgtcagcttc atcttaacgg tacaacaagt gtattttggt actgcgtttt 60  
gtacggtatg cttcctatta aattgcatct gtgtgttcag ctgtgctcg aattttgtgg 120  
tatgctacgg tagcctctcg tagtctgagg tc 152

<210> 3453  
<211> 244  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-A2

<400> 3453

aggcagatat taccgaaata tgccagagag cttgtaaact tgcaattaga gaatcgattc 60  
agaaggaaat tgagcttcaa aaacaaagag aggtcaatcc agactctatg gaagaagaag 120  
ttgatcccggt tctcatgttg acgaggaagc acgttgaatg agagtatgaa gtttgcaaga 180  
cgttccggtta accgatgcgg atgtgcgtcg ctatgagatg tacgcgcaaa acatccaagc 240  
tacg 244

<210> 3454  
<211> 138  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-A3

<400> 3454

gtcagggatt agaacatgcc tgcgagtaga aagagatgta gcgctatatt tctacctagt 60  
gcaagcgaag aagtctgaaa tacgacttgt agactgatcg ttttcttttt gccaatgggtg 120

aaaagagtgt aactcgct

138

<210> 3455  
<211> 305  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-A4

<400> 3455

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tggtgtctac tgctcgatcat ttcgtagcgg tggcgggctt tttacgacga cgacgacatg 120  
gtggttgctt cctgtcgaaa cctttttgta ctagagttga agaacaagga aaacttatag 180  
tatccgaaac cgaagatgat acccgattag atcgtttctt gaaacgccgt attggtaaatt 240  
tgctcagtc ttaattagaa aattatatcc gaaaaggatt tgtaaggata aatgggcaat 300  
tatta 305

<210> 3456  
<211> 122  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-A8

<400> 3456

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at 122

<210> 3457  
<211> 416  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-A9

<400> 3457

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tcaaaagtca gaggatatag tagtgcttat actccaactt attcatctcc ttatgaggca 180  
 tcatatccta cttatactac ttatccatgg ataaagcctt gtgctgaagc ttgtgccgga 240  
 tgcctctatt gctatcaaca atacaatttt tattatcctt atgggcttga tatectgtac 300  
 tgcaacaact ttgacaaata ttgtccagct ggatatgttc gaccatctcc ttatgaatat 360  
 tcttcttatt ctctgtggagc atatacttca tcttcttcct atgcgactcc aaccta 416

<210> 3458  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-B11  
 <400> 3458

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 gaagttctta gacatcgagt gcctaagcga gtcctaaagg aagcttaatg acctcgaatt 120  
 aacggactat cgtgttcgtt gtcaattgga agcttattcc tgtaaaccgg caggttttga 180  
 caaaaaattg agcaaategt tggagcaaag gttgttgga caacttgaag cttctccaag 240  
 ggcatccaa gcgtctcccg tgggctcttt agaagaccaa agtgcccgca agacattaat 300  
 caacctcatt tgcacactga acgctgcgca ccaggattac gactttagct cgctgcagct 360  
 ttcaagactg aaacgtgtcc aagatgtaca cgcacttcag cagcacgtcg actcgtgt 419

<210> 3459  
 <211> 264  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-B8  
 <400> 3459

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 aaaacacccc gacataagtc cgtggacaaa ctttaaggct tgctttactg gttttggaac 120  
 agctttggca ctttttaccg gttatgttgt tttagaacag gcttattact atttttacaa 180  
 gcctacacag acgcaagtcc ccgagacgaa atcggaagaa cttggctcct gagtttcgtg 240  
 ttcttgtaaa gttgggacct caccg 264

<210> 3460  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-069-Q1-E1-B9  
  
 <400> 3460  
  
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 ttgcaaacat tttcgggtata ttatgtggaa ggaatgctca caaagcttga aagccttggt 120  
 gctttcctcg ttgtacaggt cattttcttt ggagattgcg gagacactag aacaaagaaa 180  
 cattttcacc ggcaccaagc ctttggttatt tttggcaaag atttcagagg atggtaagta 240  
 ttttatgggtg gtgtatatat ctatctatct atgtgtatgg gatgattgac tatcgctcgtg 300  
 ggtaagaatt tcacaatggc aagtttggtt tttggcgctg aacgattcca ggtcatgctg 360  
 ttattttctc gttcatttgc agcacagtat tttggatatg ctcgctcatg taag 414

<210> 3461  
 <211> 253  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-069-Q1-E1-C1  
  
 <400> 3461  
  
 cgcgtcagac caaaattaca caccgcgtgt gggtgaccgt gtctgacatg gacgcagacc 60  
 agtacagtaa acagccatac ttttggccaa acatgttgct acacggagat caagattcaa 120  
 ttttggattc tattccgtta tcaatgcgat aagcacagtg aaacgaacga tataaactgt 180  
 ctgatcagtt ggtaactggt ttaaaatata tctcccgata catctcccggt ggcgtcacta 240  
 gtcgatgcat gtc 253

<210> 3462  
 <211> 446  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-069-Q1-E1-C10  
  
 <400> 3462



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 ctactatcct tttcgaatga aatggaagac ttgaatatag attctagtgt tgcagtttct 180  
 agggaaaagc aagttggaag tgcttcttcc tactctttat ggcaagaaac acttgatgaa 240  
 acagcacaac aacaagacag cgaatcgtec gtggatgaat tggaacaaat agatagaaag 300  
 gaatcggaag atattgcagt agtggagaat agagaggaag ttagtgccac acctgattca 360  
 ttatctttca aatcttcttc cagttcttca cctccaatgg aaagaaaagt tgctcttcaa 420  
 gagataaaag atactttcca acgagc 446

<210> 3463  
 <211> 145  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-C12  
 <400> 3463

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 tgtaagaata ggagaacaac cttgaaaaat agctttgtag agagaagagt ttgtttttca 120  
 gtaaagcata ttggtacttt acatc 145

<210> 3464  
 <211> 205  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-C2  
 <400> 3464

gcgtaagccc acgcgtccgc ccacgcgtcc gcggacgcgt gggtttgtca gaatcttga 60  
 gtaagcacag gatcgacatt ccgtacgttg tttgctgctc tcgtatctca tcaattcttt 120  
 gaaggatttg ctgtccgtac tagtgtttcc gaagcacact ttggcacgtg gaccactata 180  
 gtaatggtac tttgctagtc tttgg 205

<210> 3465  
 <211> 399  
 <212> DNA

<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-C4  
 <400> 3465  
 cgcgtcagcc caagcggtccg tgcaccttac catggacacg aatctcaaga atacttacgc 60  
 tgctggtgac tggtgtcgag taagctgata gcaattgggtc caagagttgg tgtaacacgc 120  
 gtatttgctc tcaatggccg atatagtgag atatttcggc gttggcatta cttgacaatg 180  
 gcttgcaata tgtccgactt gatggaaagt tgacttgtag gcaaagatcg aaagtcttgt 240  
 ctagtctcag gttggactag tcagatcgca tgagtactgc aaacattttg cttgtctctt 300  
 tgaaggctgg tggagttggt ttaaatttta cctctgcaag tcaggtgttt atattggacc 360  
 cattgtggaa tcctgcagtg gaagaacaag ctatcgata 399

<210> 3466  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-D11  
 <400> 3466  
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 caagatggtg ttagtgcttc tctttggact gtctgtctct tcctctacac agttatttta 120  
 gcattctctg ccactatcat tggcttggat ggacgtaaag cagacaacat atggaacgac 180  
 agcttattct atgatgggaa gtacattaac ttttgtgctt attctgcctc ttctgttgta 240  
 gaaggagggg accatggagc gtgtaaatat gtcatggcgt tggcgtctat aagtttgatt 300  
 ctagtctttt tcttgtggct ttttacattt gtagatgcgt tgtatcctat tcttaccaag 360  
 ttttggttta ttgaattggg tatcaacgtg tttcaaacaa tgtgggtggtt ggt 413

<210> 3467  
 <211> 205  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-D2  
 <400> 3467

cgcgtcacga ttcactgcc a tttacttgat ggacagaatg ggaagaagag tgctgtggtt 60  
aactttatta ccaggagtgc tcgttggatg tttcattata ggcttttagtt tccggagcta 120  
gcatcatcca tgggtccacga acgaatttac attgggggta ccaatacata atacatgttt 180  
tgcggttctg gtacgcgacc ccatg 205

<210> 3468  
<211> 412  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-069-Q1-E1-D5  
<400> 3468

cccacgcgtc cgcccacgcg tccgagctac ttcaactgtc caaagtgttt cagactttta 60  
cagaaaaaca attttcctct agcgtctcca agttccagct tcccgatcta ccctatgact 120  
atggcgagtt ggaaccttac atcagtgcag aaatcatgag acttcaccac caaaaaacac 180  
caccaaacct atgtcaacaa cttgaatgtc gcattggaaa agatccacaa ggcagaagaa 240  
gctggtaacg tgggtgatat gatcgcgctg caaaagatgc tcaaatttaa tggaggaggt 300  
cacgtcaatc actccattct ttggcacaac ttgggtcccg tgaataaagg gggaaggtag 360  
tccccccgat ggaccattct taaaaccagt ggaaaaagaa ttcggctcat tg 412

<210> 3469  
<211> 165  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-069-Q1-E1-D8  
<400> 3469

ctcgacgcaa gcgtacacat caggtttaga tactcgctga acttatgcat atcattaatc 60  
ggaggaacag ataccaactg gaattcccct agtagcggcg agcgatgcgg gaagaggcca 120  
ctatgagaat cctctttttc gttttgagaa tagaggagat gtatt 165

<210> 3470  
<211> 278  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-E1

<400> 3470

cacgcgtcac gcccaagcgt ccgcccacgc gtccgggatg ccacccttat tggtagaagt 60  
agcctattgt attcatgatg tgccacctat atctacctgt gtacgcacta agttctccga 120  
gttttggaga agtcatcacg aggaatggcc caagcaaaag cacatgttgc aagccgatca 180  
aagacaaccg ttgaatgaat tgctcatccg accaagttaa tacagcttga atcgatgccc 240  
tcctccataa aacccatctc gtggcatttt tttttaat 278

<210> 3471

<211> 240

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-069-Q1-E1-E2

<400> 3471

cacgcgtcag aatgaangag aaatggaata tgacaaaaga atgtcgtcag aggaggaaca 60  
agtggaaacc tctacttttg aactttcgag agaagccgag gaagcagcga taaaagcaag 120  
aaacttaacg gaaaggattg aaaagttttt ctcgaagagt taccagagcg agaagagaga 180  
tatcgaaaaa atggcttcag acaacgatgg agtgactaac ttcgatgaat cctaattggtt 240

<210> 3472

<211> 253

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-E3

<400> 3472

cccaagcgtc cggcattata ggagtgattg gagatatgga tagttatcag ttgccagatg 60  
ccaagggctt taccaatttg ataaggtatc ttggaggtgt aacgcacgag agaatacagg 120  
aaagaaggga ccaagtcttg agttgtacca acaaagactt ggtagacttt gggtcggtat 180  
tggaagtgt tgcttccaat ggtagcatatc ttgccgtagg tagtgaacaa tctttataac 240  
aagccaatgc aca 253

<210> 3473  
 <211> 385  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-E9

<400> 3473

gcacgcgtca ggacaaacat ttgtcgatca aaatgcttca agttggcttt tcttagaaat 60  
 attcgatctc atatgatata cagtgcctagt gaatcgagta cggatagtga tatcgaattg 120  
 atatcttatt ccgataataa accatggaat acgagtattc agcaaccaca agagagttgc 180  
 cccaactctt ctactcgtag aatactctta atacttgtgg gtatatcagt gctctggcaa 240  
 gacatgatta tacatggaat tggtaagtaa atgatgggtac aaagtgtgtc aggatgaatt 300  
 gcatactcct ctgcaatgtg aaaactatgc tatcgagtaa ttgtctcaaa acaagcctaa 360  
 tgttgtgggt agatgtaacg ttaca 385

<210> 3474  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-F11

<400> 3474

agcaaaatcc cgaagggtgg gattgttgtt gtctccagca gcccgtttgc gtctgtcttc 60  
 aaagtataca atttctttgg ttgttatatt tgtgtatata aacttggaat gggaacaaag 120  
 aaacaacata ttatgagcgt ttgtaggtac gagagaaaaa aggggtgtctt caactgttta 180  
 ttttcgatga ccacgctgca accgtacgta tgtagtgtaa acgcggtagt tttgtagtgt 240  
 tttgtgttct gtgaagcctg tctcattaca aaaagtaacg agatacgtgg atttgtaata 300  
 atattagcat tgttcaagga aacttcactg ttactctgaa caagtgggta tagttttcga 360  
 cttgtcaggg aaaaggcaac agcctgacag ttataagttg gaggcgtcac cagtaaa 417

<210> 3475  
 <211> 403  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-F2

<400> 3475  
 agcggacgcg tgggaggacg cgtgggaact tgttctgcat gagaattccg accacacgga 60  
 atctgaaacc agtgccttga atagtccagt gggttcgggt cgcacaaacc accaagacaa 120  
 cgaccaggag cagcatgacc atccatccaa ccttttctac aagttacttt ttggagatgc 180  
 atctgatgaa gaggaagagc caaagtcgat gaaagcagtt tcctatgaaa gtacgcatag 240  
 tggaaaagat tccacttcgt ttctgtccgt tgctacatca acaaccgata accggaagac 300  
 gcaaatatcc gatcattcca ttccatcctc ctccaatata gatatgagcg attctaacga 360  
 gaaacaacag cctattcaaa gtaatgataa tagtttgga gaa 403

<210> 3476  
 <211> 327  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-F5

<400> 3476  
 agcccacgcg tccgcccacg cgtccggtgg gttgtggagt aagtgcgctt ggcaacaaac 60  
 taaaagatgg caagaagaat catcggagct taaatgtctg acgctactgt agcgtctcta 120  
 tttagtgtga aaatgttggt ctaccttaca atacttgctg tctctatcac tattgtgggt 180  
 cttatgggta agagttccga cggatatttg gttcacagtg ttccagcgaa agacgaatat 240  
 tgtgcataca agtcttccct tcaagtaaac caccacggca tagcttcccta ttgcaagtat 300  
 atcatggctg tagcagctat tggtttg 327

<210> 3477  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-F9

<400> 3477  
 aggaggttgc ttcttggtca tccaagacga tccttgaaac attgccatcg ttgttattct 60  
 ccgtccatcc acatgtcaaa tacaactccc gagaacccta gtgcagagag actactagaa 120  
 tgggaaagta cactagttaa agagttgcaa acgcttcggt ttcttccacc cgtttcattc 180

atctattctc ctctagagta tgcgtggcct ttgcacgaag aatatgttcg tcgatattat 240  
 cgtccaacag cacgtgtttt attcgttgga atgaatcctg gaccttttgg aatgggtccaa 300  
 agcgggattc cttttggtga tgttggtatc gtcaaagagt ggctggatat tcgtggcgat 360  
 cttgtattca cagcgttacc tgagcgtgtg catcccaagc gacctatttt aggactgcat 420  
 t 421

<210> 3478  
 <211> 412  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-G1  
 <400> 3478

agaaagccaa gtgaggaaaa gaaggcaagt agaggggcggc ccgagaaagg agaggggcgta 60  
 agacgtgata cagagtagga agaaaagaga agagagctag aaaggaggta aaagaagagt 120  
 aaaaggacta gaagaggtag ggaattcacg aggaaggagc gtgaagggaag gaggaatccc 180  
 aagttatcga ggaagaaaaa gcttcggtga aagcgtgaac ggatttttga cacactgccc 240  
 gtcaagttct ggaagtgtgc taggaataag caccgagaagt agaagagagt agggaaaagaa 300  
 gaaaggaagt gaagacgtaa gacgtgaaaa aaaagcgtaa gacgtgatac agagtaggaa 360  
 gaaaagagaa gagagctaga aacgacgtaa aagaagagta aaaggactac aa 412

<210> 3479  
 <211> 364  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-069-Q1-E1-G10  
 <400> 3479

aggagagaca gacagatggc caacgctggt caagatggcc ttgtgcaagt caacaaacat 60  
 agaaaagtaa agagattgca agaagataat attttgaata gagcactatc acaaccagga 120  
 gatgtatttc tgtgcttttg caacatccag ttgttggtga atgcagaaag agctattata 180  
 ggaaatatta cttgtccaga aagtatcgaa ttgtgtcgtc tattagctgg acatatagca 240

gtttggttcg atgaacattt ggatgacttt cgtttgaag ctatcttggg agcactattg 300  
 tgtacttggt attgtgagtg gaagcgtttt gaaggagaat tggnggtaca agaatggaat 360  
 gaat 364

<210> 3480  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-G3  
 <400> 3480

ggggagggag gaggatgcaa ggttggaaga aaccagtcac aaccgatgct tttggaaaca 60  
 gagtaactta tgtgttgaaa agatatttca acgcacctac tactggagaa gaggttgccac 120  
 attcgttggg tggcatgtg accgatgcag atacgttggt acggcacaaa gggctgggag 180  
 aagaacacgc gtattttctg aaagaagacg ctcgcaagtt tgaaaagttg gcaaaacagt 240  
 tgaaaagtgc gttgaattca cggaaactaa tgacaaaaga acaactcaaa gtggccatgg 300  
 aacagagagg aatacaagta tctgaagagg gtttagagga cttgcttcgt ccaaaagagc 360  
 acattcgaat ctcggatgca agtagcagtg gtacgtaaga acaagctaaa gac 413

<210> 3481  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-069-Q1-E1-G5  
 <400> 3481

ccttgtcgac agtgtgaagc ttgcagaaag ttgaccaact ttgccagggt ttgcactat 60  
 gtcgggtcaa aacttctttt gagaagaaac caaatattga gaactaaagt cccgtgggta 120  
 cttttatgta gttcgataaa gtcttcggat ttgagaaagg cagacagagt ttgttttttt 180  
 gtagctgacg cagctatttt gtcaagtagc actagaaatg agttactgac tgcctttgaa 240  
 agtctttctt gtttgaaaag cacctttgga aggttcatt atttcgtcgt atccgatgac 300  
 agtttgagg aggtgaaaag acatatttcc ttgtcagctg gacaagggtt taaaacggaa 360  
 gttttgatca ctctggagg agctcaagtt ttccaacttg 400



<210> 3482  
 <211> 280  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-069-Q1-E1-G6  
  
 <400> 3482  
  
 cggctcgacc cagcctaca gtgagattcg ggatagactg gaaattatgg caaaaccacg 60  
 tgccaacagc agcggtaaaa agatgtgtag caatcggtag agtcaaaaga actgtagtgt 120  
 aaacagacga gtacatacag taacgtgtca agaaggaaca ggaaagcgag agatcagaca 180  
 gacaagggat taaaatgcaa gagatccact acaggaataa gcattgaaag attagatatg 240  
 acatacacat ctaaattgac gcgagaatac actatgaatg 280

<210> 3483  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-069-Q1-E1-G7  
  
 <400> 3483  
  
 aagaaagagg caaatacggg aaagcagtaa aagaagaaag agaaaggaaa aaactgagta 60  
 tcaggaagaa aagagggagt agatgaggaa agaaagatca aagaagtaag agtaagaaaa 120  
 agagtaatgt aaatgaaagc aggaaagtat tgaaaaaaga gaatgtaaag cgcctaactt 180  
 ttgcaaaaat gttccaacca gtgaaagaag aagcaaaaag aaagaaaaag aagttaccac 240  
 gtaagaccgg aagctaattg atcctaagct gtccaagcga agtaaggctg aaccaatatc 300  
 tgttgaaaaa gatgtggaag agatagcata agggggtaaa ggccaatcaa agctaattgat 360  
 acctggtact cctcgaaagc tatataagta tcgtatgcac gaaag 405

<210> 3484  
 <211> 252  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-069-Q1-E1-G9  
  
 <400> 3484

agcccacgcg tccgagtggg tattgcgact cacaggcctg gatggaattt gtcgatcatt 60  
 gtctttggga atctagggat tctcatacag cagacagttt agtcgaattt gtgtcttctg 120  
 tatgtcttcc ctgagacttg tcagttcttt aacaatagaa cctcctattc tttcaggctt 180  
 tttcaattct ttcaatatga tatttttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagg 240  
 cggaagaaca aa 252

<210> 3485  
 <211> 269  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-069-Q1-E1-H1

<400> 3485

agcccacgcg tccgtttggt ctgaatcaag gagaagtttg tacttgtcca tcgagagctc 60  
 ttgttcacga gtccatttac gacaagtta tcgaaaagg gattcaaaga cttggtaaaa 120  
 taaagcaagg agatccactc aatttggaga ctatggtggg agtcaagta tctactgaac 180  
 agatggataa gattcttcac tatgtggaat tgggaaagaa ggaagggtgct cagtgtattg 240  
 ttggaggaag tggaaagaaa gccattgga 269

<210> 3486  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-069-Q1-E1-H12

<400> 3486

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 gtggaaggcc tttgggtatt gtgacagaaa gagattatct tagaaagata gtacttttgg 120  
 gacgctcatc caagacaact tatgtaaagg atatcatgac gtctgccaat gatctaatta 180  
 gtgtcaaccc ttcagcttct cttagcgaat gtatggaaat aatgactcag aaaagaattc 240  
 gtcacattcc ggtaatagat agtgaaggca atgtgaaggg aatggtatcc atangagata 300  
 tcgttagaga actagtcgaa gaacaacgac atgaagcgaa gaaactgaat gaatacatc 360  
 aggggactta ttaagatggg ctccttcgag gcttgaagtg cttttgttga tttgtgcaca 420

gaataaacat

430

<210> 3487  
<211> 431  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-069-Q1-E1-H4  
  
<400> 3487

gactcaagcg tacgcccacg cgtccgcccc cgcgccgga gtggcagcac gtgtgatgta 60  
tatatgagaa agaaaatgat acaagagaga actatcagtg gccctgtgaa agagagcact 120  
gatgctgata tcagacacac ggtagcagat aggtttacta tagatgtata cattgggtct 180  
aggtacggca gatacgggac cttaatatgtg gcatccggat acatgtgccc atgtccaaat 240  
agtacatgan agggtaaaat ccgcttttag cgacgataca cgaaacgggt gtgttagatc 300  
aagatggcca agatgtacca cgctgagaat gaacggtttt cctttgagag agtcgtgtac 360  
gatgagttaa agtgacagcg acgagagttg tgccagtgc gacaagacga tgaaaccttg 420  
caccaagaga c 431

<210> 3488  
<211> 244  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-069-Q1-E1-H7  
  
<400> 3488

acgcgtcaga ccaaataaca tgtcgaccca aaacgcagta ggctctcca acttgataag 60  
gagaaatagc gtttcacgca gttccgggtt aactagttct ggtacgagca cctcggggaa 120  
gtatttttcc gcgcgactgt ataacgacga agcaccgggt ttgagagtgg gaccaacgtc 180  
tgttagggtt tttagctatg tctttaaagc ttttggtgta gttttgcatg tgtgggtccaa 240  
gttt 244

<210> 3489  
<211> 409  
<212> DNA

<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-070-Q1-E1-A10  
 <400> 3489

acgcgtccaa gcaagcgtga accgtgaggg tagttcatca tggttgagac aaaacttcaa 60  
 gatgggtgta gtgcttctct ttggactgtt cgtctcttcc tctacacagt tatttttagca 120  
 ttctctgcc aatatcattgg cttggatgga cgtaaagcag acaacatatg gaacgacagc 180  
 ttattctatg atgggaagta cattaacttt tgtgcttatt ctgcctcttc tgttgtagaa 240  
 ggaggggacc atggagcgtg taaatatgtc atggcgttgg cgtctataag tttgattcta 300  
 gtctttttct tgtggctttt tacatttgta gatgccttgt atcctattct taccaagttt 360  
 tggtttattg aattgggtat caacgtgttt caaacaatgt ggtggttgg 409

<210> 3490  
 <211> 209  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-070-Q1-E1-A11  
 <400> 3490

atactaagtc gtatcatgag ggtaaatcaa caaagaaaaa gggcgggagc cccaaaaagg 60  
 ttcaaagcct tcataatgga acaggccgac gtttcaaccc ctccaaaact gtctaccaaa 120  
 cttcaattca aaggactgcc ttttaaaaag gtcaagccgg gaaaaaccg ggggtaaccc 180  
 aattaaacgc cttgaagaa aatccccctt 209

<210> 3491  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-070-Q1-E1-A12  
 <400> 3491

atgccaatTT agaagtgttt tcgaagaatg gggttcgatt tgagaacgat gtttacattc 60  
 caacggatga gcctcatggc actattaagg caacgttgtc aaggtcttgc cttgcaaaat 120  
 tgtaaagaag cggaacagag cgaacatatc acataagtga gcaacaagaa catttattct 180

attccgtata cttcattttt tttcatttgt ttccggacatc tcattctctta gcctacattc 240  
 caatcgcaac tcttgtcgaa actctgcgta ctgtacgtcc ttttctatta cgttcctttc 300  
 cttgtattct ggagttagaa accaagtaac gatgaccccc agaaacgcga ctctgtgtga 360  
 aacaaactgc agattt 376

<210> 3492  
 <211> 425  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-070-Q1-E1-A2  
 <400> 3492

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 tagtgcacta acaaacataa gaaagagaaa caccgatgaa gaaagcggag gaggggaaga 120  
 agcgagaaaag gagaccacct atggtttagg tgggtgcttat atggatatgg caggcgtcaa 180  
 tggccatgga aatccacatt tacaacatgc caacttacct ccagcaatga gacatttttcg 240  
 caacgttgca gggaaaccgg ctatattggc actctctgct ttttcaacgg gagcttggtt 300  
 tcttggtatt gtgaatgtan gactcatttc ttccgagtta ctctctactg tagcacctcc 360  
 agcctttttt tacagtggat tttgtcaaat tgttgctgga atcctaactt ttgccaataa 420  
 tgaca 425

<210> 3493  
 <211> 339  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-070-Q1-E1-A4  
 <400> 3493

acggacgggtg ggggtctccac caagagagtt gcaaagaaac taatggattt actttgaaat 60  
 gtcgcgaaag tgacaatacg acttgcttga gaaaaagcaa gaaactgaag tccgagcttt 120  
 gttactactt tactcggttt ggtgtttgca atgacaagca atgtcgcttt gttcacgacc 180  
 ccgaaaaggt tttcgtatgt cgaaagttta ttagcggttc atgtatcgat cccaactgca 240  
 cactactgca cactacagaa aaggatacgc ttctgtgtg tttaatgttc ctaagtggat 300

tatgtggaaa ggagaactgt cctttcgttc acgttaatg

339

<210> 3494  
<211> 415  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-A9

<400> 3494

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